

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 623.—VOL. XVII.

LONDON, SATURDAY, JULY 31, 1847.

[PRICE 6D.]

PATRICROFT—IMPORTANT COLLIERY FOR PIONEERING SALE.
MR. T. M. FISHER is directed peremptorily to SELL, BY AUCTION, on Tuesday, the 2d day of August, 1847 (unless previously disposed of by private contract, of which due notice will be given), at the Law Society's Rooms, North-street, Manchester, punctually at Four o'clock in the afternoon, all that well-known and well-established COLLIERY, situated at PATRICROFT, near Manchester, now worked by the owner (who is withdrawing from the trade), together with the STEAM-ENGINES, STEAM-BOILERS, HEADSTOCKS, WINDING GEAR, BUILDINGS, and other fixed matters thereto belonging. The purchaser may also take the loose stock, consisting of boats, carts, horses, &c., at a valuation, but will not be held bound to do so. This colliery, established on a first-rate principle, has only been at work about six years, and is partly freehold, and partly held in lease, under Sir T. J. De Trafford and the trustees of the late Duke of Bridgewater. The machinery is of the best modern make, and in excellent working condition—the situation one of the most convenient in the county for a ready sale of all the produce, having a ready-made basin communicating with the canal, and a short branch railroad partly made, which will enable the coals to be delivered in Manchester at 6d. per ton. In addition, it is ascertained that a rich bed of ironstone, 22 in. thick, exists upon the property, which, from analysis, is found to contain from 23 to 37 per cent. of metallic iron. This may be leased on very reasonable terms; and as the coals are most suitable for smelting, and limestone is to be had on the estate, can be profitably worked, at little extra expense.

Orders to view, and other particulars, will be ready 31 days before the sale, and may be had from the auctioneer, 21, Prince-street, Manchester; W. Heaton, solicitor, Rochdale; Woodcock, Part, and Scott, solicitors, Wigan; W. Benson, solicitor, King-street, Manchester; T. Livesey, Chamber Hall, near Oldham; or J. Hodgkinson, on the premises.

CARADON CONSOLS MINE—SALE OF MOST IMPORTANT AND HIGHLY VALUABLE STEAM-ENGINE AND MINING MATERIALS.

MR. W. MURRAY will SELL, BY PUBLIC AUCTION, on behalf of the adventurers of the said mine, situated in the parish of ST. CLEER, in the county of Cornwall, on Wednesday, the 4th day of August, 1847, precisely at Ten o'clock in the forenoon, all the very superior

MINING MATERIALS, &c.
thirteen, comprising a first-rate 45-horse STEAM-ENGINE, with two boilers, of 12 tons, all complete, and nearly new; an excellent winch, of double power; 1 9-foot 9-inch wind-bore, 1 6-foot 9-inch ditto, 2 9-inch do., 1 9-inch H-pipe; 1 9-inch plunger-pole, with case, stuffing-box, and gland; 1 10-inch ditto, with ditto, 1 6-inch ditto, with ditto, 15 9-foot 9-inch pumps, 15 9-foot 11-inch pumps, 16 7-inch ditto, 1 10-foot 6-inch wind-bore, 1 6-inch do., 1 11-foot 6-inch working barrel, 2 9-foot 9-inch ditto, 1 9-foot 9-inch wind-bore, 2 10-inch do., 1 10-inch H-pipe, 18 10-inch wind-bore, 1 9-foot 10-inch working barrel, 1 6-foot 6-inch wind-bore, 1 6-inch do., 1 6-inch H-pipe, 1 11-foot 10-inch working barrel, 2 prime horse-whips, 80 fathoms of 4-inch H-pipe, 1 tackle rope, 150 fathoms of 3-inch chain, 2 shafts, tackle, and sheaves, complete, 2 cisterns, 5 feet by 4 and 4 1/2, 50 fathoms of 10-inch main-ropes, with strapping-plates and bolts, complete; 44 fathoms of main-ropes, 7 1/2 inches square, strapping-plates, bolts, &c.; 2 balance-bobs, 1 angle-bob, with all necessary castings; 100 fathoms of 3-inch round iron rods, with sheaves, complete; 20 fathoms of 1 1/2-inch round iron bucket-rods, clack seats, and valves to fit the respective lifts; 75 fathoms of 12-inch capstan-rope, and 5 suitable sheaves, 2 feet diameter; screw stocks, with taps, plates, wrosts, &c.; 1 boring machine, 2 air machines, a set of shaft rollers, a quantity of bolts, staples, and glands, iron pump rings, smith's bellows, 36 inches diameter, anvil, crane, and vice, iron horse.

A great quantity of smith's and miners' tools; a lot of steel, and a variety of new and old iron; 3 horse wheelbarrows, 4 wheelbarrows, about 5000 feet of new and old plank, 20 fathoms of prime sheet lead, about 200 fathoms of air pipes; a quantity of new and old timber of all descriptions, carpenter's bench, 5 large and excellent chests, gasket and hemp, safety fuse, several bags of nails of different sorts, lot of tallow, wheelbarrows, grinding stone, and in fact every requisite for carrying on the operations of mining. Also, the COUNT-HOUSE FURNITURE, &c., &c.

The auctioneer invites the particular attention of mine agents and others to the above superior lot of materials, which are nearly new, and will be sold without reserve. For viewing the above, apply to Capt. Whitford on the mine; and for all further particulars to Capt. James O'Connell, South Caradon Mine, or to Mr. W. Murray, auctioneer, 21, Prince-street, Manchester.

Castle Villa, Llanberis, Auction and Mining Offices, July 19, 1847.

VERY EXTENSIVE AND IMPORTANT SALE OF VALUABLE STEAM-ENGINES, MACHINERY, AND MATERIALS OF ALMOST EVERY DESCRIPTION.

AT THE TRELOGAN MINES, NEAR TO HOLYWELL, IN THE COUNTY OF FLINT.
MESSRS. CHURTON have the honour to announce, that they have received instructions from the proprietors to SELL, BY AUCTION, on Wednesday and Thursday, the 4th and 5th days of August next, 1847, at Eleven o'clock in the forenoon, upon the premises, at Trelogan, situated, the whole of the

MACHINERY AND MATERIALS.

Comprising ONE PORTABLE CONDENSING STEAM-ENGINE, with boiler, &c., complete; TWO PUMPING-ENGINES, plain and strong, with parallel motion, cylindrical boilers, 29 feet long by 4 feet diameter, and all the appendages for the two; cylinders of various sizes, cylindrical and wagon boilers, pumps, working barrels and windbores, clack, clackdoor, slide, and bucket pieces, of different sizes, feed and steam-pipes, weighing machines and scales, the whimsies, head gear, and other apparatus at the Afonwg, Porthgwen, West End, and South End. Quality, Rock and Steel End shafts, capstans, turn trees, ropes, large quantity of various sized chains, capital crushing mill, complete; bar-iron, smith's tools, tongs, anvils, vice, hearth, business, &c.

POWERFUL WINDMILL.
with five sails, 60 feet diameter; numerous waggon-wheels and axles, galley frames, fly-wheels, scrapers, old brass, fire and common bricks, wheelbarrows, handbarrows, ladders, joiners' benches, shovels, picks, boring tools, cast-iron rope wheels, and a very extensive assortment of other miscellaneous effects appertaining to the mines, together with the whole of the OFFICE FURNITURE and fixtures.

N.B.—The whole will be on view up to the time of sale. Descriptive catalogues may be had at all the principal inns in the neighbourhood; upon the premises; from Mr. Joseph Howell, engineer, Hawarden (who will, upon application, give any further particulars); and at the auctioneers' offices, in Chester, or (41, Lord-street) Liverpool.

EXTENSIVE AND IMPORTANT SALE OF VALUABLE MINE MATERIALS.

AT WHEAL GILL MINE, IN THE PARISHES OF ST. CLEER AND ST. IVE, CORNWALL.

MR. MURRAY has received instructions to SELL, BY PUBLIC AUCTION, on Tuesday and Wednesday, the 10th and 11th of August, 1847, at Eleven o'clock in the forenoon of each day, at the aforesaid mine, all the truly

VALUABLE MINE MATERIALS, &c.

comprising ONE very superior 10-horse STEAM-ENGINE, with 11 tons boiler, condensing cylinder, and one piece of rod complete, nearly new, and constructed on the most approved principle.

1 Excellent WATER-WHEEL, 50 feet diameter, and 3 feet 3 inches breast, with pit-lane blocks and braces.

15 Fathoms of 1 1/2-inch drawing-lifts, with 14-inch working barrel and windbores, with clack seating and buckets.

14 Fathoms of 9-inch drawing-lifts, with 8-inch working barrel and windbores, clack seating and buckets, all complete.

40 Fathoms of 12-inch plunger-lifts, with plunger-pole, case, stuffing-box and gland; 11-pieces, windbores, clacks and seating; 1 15-inch plunger-pole, with case and stuffing-box; 1 12-inch pump, with windbore and do; 1 9-foot 10-inch working barrel, 1 11-foot 9-inch working barrel, 1 9-foot 9-inch pump, 1 3-foot 12-inch pump, 3 4-foot matchings, to suit 8, 10, and 12-inch pumps; 1 6-foot 9-inch pump, 1 3-foot matchings, to suit 8, 10, and 12-inch pumps; 40 fathoms of 12-inch main-ropes, strapping-plates and rod-pins; 32 fathoms of 10-inch hanging-ropes, with strapping-plates and rod-pins; capstans and sheaves, complete; 80 fathoms of 12-inch capstan rope, 3 horse-whims, winch-rope and chain; 4 whip-kibbles, 36 fathoms of 12-inch bucket-rods, 14 fathoms of 14-inch ditto, 17 fathoms of 12-inch ditto, 20 fathoms of 12-inch ditto, 2 whip-pulleys, 60 fathoms of 2 and 1 1/2-inch flat iron-rods, 100 fathoms of 12-inch ditto, 30 fathoms of 14-inch ditto, 30 fathoms of 16-inch ditto, 100 fathoms of 6 and 4-inch air-pipes, 1 36-inch smith's bellows, 1 anvil, large vice, smith's tools, a great quantity of new and old timber, miners' chests, wheel and hand barrows, shovels, carpenter's bench, and a great variety of other useful articles.—Also, the COUNT-HOUSE FURNITURE, &c., &c.

To view the above superior lot of valuable materials, apply to Capt. Pugh, on the mine; and for further particulars, to Mr. Robert Taylor, the purchaser; or Mr. William Murray, auctioneer, &c.

Dated Castle Villa Auction and Mining Offices, Llanberis, July 22, 1847.

TO BE SOLD, BY PRIVATE CONTRACT, AT GODOLPHIN PHIN MINES, ONE 36-HORSE PUMPING-ENGINE, 6 feet stroke, equal beam, boiler, 8 tons, balance-bob, and first piece of rod.

ONE 24-HORSE STEAM-ENGINE, 8 feet stroke, boiler, 11 tons.

ONE 24-HORSE WORKING BARREL, 6 feet stroke, boiler, 4 tons, and cage.

ONE 18-HORSE WHIM-ENGINE, 4 feet stroke, boiler, 7 tons, and cage.

SIX TUBULAR BOILERS, 11 tons each.

A large IRON BALANCE-BOB, 12 tons.

Application to be made to Capt. R. Williams, on the mine.

Dated Godolphin Mines, Helston, Cornwall, May 27, 1847.

STEAM-ENGINE, &c., FOR SALE.—FOR SALE, BY PRIVATE CONTRACT, AT MAGPIE MINE, NEAR BAKEWELL, DERBYSHIRE, an excellent 40-horse PUMPING-ENGINE, upon the Cornish principle (stroke 9 ft. in the cylinder, and 7 feet 3 inches in the shaft), with one cylindrical boiler, about 34 tons weight, winch, main-caps, and first piece of rod.

Capstan and shears, all iron work complete with it; 2 pairs of hammered iron-rod plates.

Three 10-inch plunger-poles, each 9 1/2 feet long, with stuffing-boxes and glands, cap-door and H-pieces, and windbores to fit.

Three 9-inch plunger-poles, each 9 1/2 feet long, with stuffing-boxes and glands, and two cases to fit; an engine counter, or register; a quantity of rod and flange bolts, and sundry other materials.

For particulars apply to Mr. Samuel Bennetts, Alport, Bakewell.—July 27, 1847.

IMPORTANT AND EXCELLENT INVESTMENT.

TO COALMASTERS AND CAPITALISTS.—TO BE LET, for a term of years (as may be agreed upon), that old established concern, POLESWORTH AND BIRCH COFFEE COLLIERY, in the parish of POLESWORTH (between the towns of Tamworth and Atherstone), in the county of Warwick; and, from the well-known quality of the coal for household purposes, commands an extensive sale in the surrounding country, as well as the facility of water conveyance by canal to Coventry and the adjacent neighbourhood, where a large proportion of the produce is daily conveyed; and from its vicinity to the Trent Valley Railway (and other lines likely to be immediately formed), the property offers an unrivalled field for investment, especially as the extensive markets of the Midland Counties will hereafter be opened to receive its produce.

The estate also abounds in ironstone and fire-clay—from the latter excellent bricks and tiles are now in active manufacture.

Mr. John Ross, of Polesworth will show the property; further particulars may be had on application to William Thomas, Esq., Bryn Merlyn, Baglit, near Holywell, Flintshire, July 22, 1847.

TO CAPITALISTS.—ELIGIBLE INVESTMENT.—TWO

SIXTEENTH SHARES in an extensive and valuable SLATE QUARRY, held under the Crown, and situate about four miles from BAKWELL. A capital of upwards of £20,000 has already been invested, and 10 per cent. returned in the first year. An extension of the works has now been determined on, with an increase of capital to £35,000. One of the proprietors wishes to dispose of a PORTION of his INTEREST: the price per share is from £1600 to £1700, and the purchaser might suit his convenience in the time of payment. The demand for slates is unlimited, and the price has lately advanced 10 per cent. The person wishing to sell is associated in this quarry with several gentlemen—merchants of long standing in London, &c., whose names guarantee the highest quality of the slates. Further particulars may be known, and an inspection of the books of the company obtained, by application to Messrs. Crossman, Sonneton, & Co., 29, Abchurch-lane, London.

TO CAPITALISTS.—THE ELY VALLEY.—TO BE LET,

BY TENDER, all those SEAMS of highly-bituminous COAL, lying under several hundred acres, in the above valley, and containing, in the aggregate, more or less, 200,000 tons of workable coal—the greater part of which is available by water-power, the property being bounded by the River Ely and its tributaries. Also, will BE LET, the LEAD mine on the above property, which, when worked, 50 years ago, produced one of the best quality—specimens of which, as also of the coal, may be seen, and particulars obtained, by application to the Rev. James Cosens, whose primary object being the opening of the Ely Valley, he would be satisfied with a fair sliding rent and a moderate royalty.

The South Wales Railway is now in progress within three miles of the property, and a line to join that line, might be made at a comparatively trifling outlay. The distance from the nearest point of junction to the port of Cardiff would be about nine miles.

For particulars apply to Messrs. Crossman, Sonneton, & Co., 29, Abchurch-lane, London.

TO CAPITALISTS.—CARMARTHENSHIRE AND

GLAMORGANSHIRE, SOUTH WALES.—THE AGENT of an extensive estate calls the attention of Ironmasters, Colliers, Manufacturers, Farmers, and Capitalists in general, to this announcement—he is prepared to ENTER into ARRANGEMENTS with respectable PARTIES for the LEASING, on long terms, of VARIOUS DESCRIPTIONS of PROPERTY, now the object of public attention. Andraeth and Bitumensous Coal and Limestone, Ironstone, Limestone, Marble, Flag, and other quarries—Fire Clay and Brick Earth, Land for erecting at, and near, a flourishing and fast-rising commercial town, sea-port, and fishing dock, manufacturing, shipbuilding yards, wharfs, store and dwelling houses; and, in the coal and iron districts, RITES for WORKS, joining a railroad and canal, leading, by their main trunks and branches, to three seaports—water-power is almost general.—SITUATIONS for RURAL and MARINE RESIDENCES in the most beautiful parts of the country, commanding views of Swansea and Carmarthen Bays, and the Black Mountain, with good roads, cheap markets, and daily communication with Bristol, Gloucester, and the metropolis.

The estate is situated in 24 parishes, offering, in every variety of soil and scenery, numerous objects of interest to the geologist, the sportsman, and the admirer of the picturesque. As an inducement to capitalists to embark in such agricultural improvements, as draining, planting, erections of proper homesteads, &c., which now so deservedly occupy public attention, LEASES of NINETEEN YEARS will be granted for the purpose of carrying out a large proportion of the estate on the sea-coast; while the contemplated inland railways will bring the collieries, ironstone, limestone, and stone quarries, within an easy distance of the agricultural counties of Hereford and Worcester, and the great chain of railway communication, connecting Birmingham, Liverpool, Manchester, and all the important manufacturing districts of England.

For further particulars apply to F. L. Brown, solicitor, Llanelli, John Williams, solicitor, 1, Verulam-buildings, Gray's Inn, London; Messrs. Brooks and Green, estate agents, 10, Bond-street, London; Mr. John Farran, estate agent, 20, Fleet-street, Liverpool; Alfred Henderson, solicitor, Albion Chambers, Bristol; Messrs. Horsfield and Harrison, solicitors, Leeds; and Mr. G. H. Baine, 66, Camden-street, Dublin.

FOR SALE, a substantial CRUSHING-MILL FOR ORES,

&c., which has never been in use, consisting of the following—viz.: Complete framing for two sets of rollers—one set fitted, and one set plain rollers; carriages and shafts for ditto; one spare set of each kind shafted, and one spare set of each kind unshafted, and four spare brasses; four wrought-iron levers for rollers; pins and shoes; two first motion wheels and two pinions, to connect crushing-mill and engine, and two shafts and carriages for the same; shafts and spindles for rollers; four carriages and brasses for first motion wheels.—Application to be made to Dr. Richardson, Assay Office and Laboratory, Newcastle-on-Tyne.

IRONSTONE.—TO LET, the WORKING OF THE IRON-

STONE, lately discovered in a certain portion of a farm, in the TOWNSHIP of ESKDALESIDE, situated near the Whiffy Branch of the York and North Midland Railway, and within five miles of the port of Whitby.—Further particulars may be obtained on application to Mr. H. S. Walker, Woodlands, Whitby.

STRONG MIXING PIG-IRON.—THE YSTALYFERA

IRON COMPANY beg to solicit ORDERS for their ANTHRACITE PIG-IRON. This iron mixes well with Scotch pig—imparting to it strength and elasticity, and resisting from it a portion of its softness and fluidity. No. 3 pig is recommended for mixing with soft iron—Nos. 1 and 2, for machinery castings, requiring great soundness and strength. At this period, when cast-iron is so much employed in the construction of bridges and other buildings, requiring all the strength and elasticity which the best mixture of metal will afford, it may be interesting to call attention to the characteristics of the ANTHRACITE PIG-IRON, as reported on by that great practical authority, the late DAVID MURKET, Esq., M.L.C.E.:—

"It greatly exceeds, in strength, in defective powers, and capacity to resist impact, any iron at this time manufactured in the United Kingdom."

"It now only remains for me to mention a property peculiar to this iron, which was noticed at the time I made the trial experiments, four years ago, but which has been more fully developed in those more recently made. The property referred to is one of great springiness, or elasticity, which communicates a tendency to the bar, in deflecting and breaking, to resume its rectangular form. Bars that had obtained a permanent set of 10-12ths, when afterwards broken, presented but a slight deviation from a right line; and, in no case, did the curvature exceed one-fourth of a tenth."

"It was also remarked, that most of the fractures, in breaking, presented a regularity of grain throughout, resembling the structure of unhardened steel."

Address THE YSTALYFERA IRON COMPANY, Near NEATH, SOUTH WALES.

Dated June 22, 1847.

HOT-BLAST WITHOUT COAL, LABOUR, OR REPAIRS.

DIXON AND BUDD'S PATENTS.

Apply for particulars, or to inspect the process in operation on six blast-furnaces, to J. Palmer Budd, Esq., Ystalyfera Iron-Works, near Neath.

Dated June 22, 1847.

STEAM TO INDIA VIA EGYPT, MALTA, ITALY,

ALEXANDRIA, AND THE PENINSULAR PORTS.

PASSAGE TO BOMBAY, MADRAS, AND CALCUTTA.

The Peninsular and Oriental Steam Navigation Company BOOK PASSENGERS for CEYLON, MADRAS, AND CALCUTTA direct, by steamers leaving Southampton on the 20th, and for Alexandria, en route to Bombay, on the 1st of every month.

A steamer from Southampton leaves the 1st and 20th of every month for Malta, whence are steamers to Naples, Genoa, Civetta Vecchia, three times a month.

STEAM TO CORUNNA, OPORTO, VIGO, LISBON, CADIZ, AND GIBRALTAR.

A steamer leaves Southampton on the 7th, 17th, and 27th of every month.

Apply at the Peninsular and Oriental Steam Navigation Company's offices, 51, St. Mary Axe, London, where only passages can be secured throughout.

SMITH AND ENGLISH (LATE ANDREW SMITH),

PRINCES-STREET, LEICESTER-SQUARE, LONDON.

ENGINEERS, MACHINISTS, IRON AND BRASS FOUNDERS, &c.

PATENTERS AND MANUFACTURERS of Improved Steam-engines, Rapid Steam Generators, Railway Wheels, Rails and Chairs, Propellers for Canal and River Navigation.

ROPE-MAKING, FLAX-DRESSING, AND OTHER MACHINERY.

Raising and Lowering Machines, Wharfs, Warehouse, and Truck Cranes, Tramway, Traversing and Stationary Purchases Crabs, Tackle, &c.—Also, Steam-engines and boilers of various constructions; Bone, Sugar, and Mill Work, and Machinery of every description manufactured and repaired; Saw-mills, Breweries, and Factories attended.

Mining, Drying, Turning, Screw-cutting, &c.

TO AUSTRALIAN OR AMERICAN MINING COM-

PANIES.—THE FRIENDS of a GENTLEMAN, who, for several years, has been PRACTICALLY ENGAGED in the SMELTING of COPPER ORES, in reverberatory furnaces, and who is now on the continent, for the purpose of perfecting himself in the several methods of reduction with charcoal, by the blast-furnace, are desirous of procuring AN ENGAGEMENT for him, with an AUSTRALIAN or AMERICAN COMPANY, either to form an establishment for the reduction of copper ores, or to superintend an establishment of the kind, for which he feels himself competent.

Applications, for further particulars, to be made (by letter) to Mr. E. J. Cole, 47, Minster Office, Winchester-house, Broad-street.

TO ENGINEERS, CONTRACTORS, &c.—IRON RAILS

FOR SALE.—TO BE SOLD (CHANCE), about FIVE HUNDRED TONS of MALLEABLE IRON RAILS, weighing 45 lbs. to the lineal yard. The rails have not been used, and are of the best quality.—For particulars apply to Whitcomb and Barton, 65, Old Broad-street, City, London.

BLAKE AND PARKIN, MEADOW STEEL WORKS,

SHEFFIELD, MANUFACTURERS of RAILWAY and OTHER SPRINGS, IMPROVED PATENT PLATED MOTION BARS, BUFFER-RODS and ENDS, CRANK PINS, PISTON RODS, ENGINEERS' FILES, CIRCULAR and MILL SAWS, and CUTTING of all sorts.

WILSON & FRASER, 2, WELLINGTON-BUILDINGS,

LIVERPOOL, and 13, EXCHANGE-PLACE, GLASGOW, have always ON HAND

PIG-IRON, BAR-IRON, RAILWAY CHAIRS, and RAILWAY BARS.

MINING OFFICES, 1, ST. MICHAEL'S-ALLEY, CORNHILL, LONDON.

WATSON AND CUELL, MINE AGENTS,

N.B.—STATISTICAL INFORMATION furnished (on application) to SHAREHOLDERS in MINES in Cornwall, Devon, Scotland, Ireland, Wales, and Spain.

JOHN TREGONING, MINE SHARES COMMISSION

AGENT, HIGH-CROSS, TRURO, 22

WILLIAM H. SMITH, MINING SHARE AGENT,

10, WATFORD-COURT, THROGMORTON-STREET, LONDON.

JONATHAN DAVEY, MINE AGENT, SURVEYOR, AND

SHAREBROKER, MATTHEW-STREET, LIVERPOOL.

Mines surveyed, inspected, and reported on, at the shortest notice; plans, sections, and

diagrams performed, by day or contract.

MR. R. TREDINICK, MINING AGENT AND DEALER

IN EVERY DESCRIPTION OF SHARES, THREE KING'S COURT, LOMBARD-STREET, LONDON.

THOMAS P. THOMAS, MINE AGENT, AND DEALER

IN RAILWAY AND OTHER SHARES, 19, THE NEEDLE-STREET, LONDON.

Mr. T. P. THOMAS is a SELLER of West Wheel Providence shares, at 181st Queen's

Consols, at 225; Wheel For Consols, at 224.—and is a BUYER of Trevelyan and Barrister

North Pool, East Pool, Trehan, and West Wheel Providence.

JAMES LANE, MINING SHARE DEALER,

75, OLD BROAD-STREET, LONDON.

BRITISH MINING OFFICES, 41, MOORGATE-STREET,

LONDON.—PROSPECTUSES may be had, and ORIGINAL SHARES ALLOTTED

in the COPPER and SILVER-LEAD MINES connected with these offices, on application to the secretary, THOMAS HENRY TAYLOR.

MONEY.—MESSRS. WINSTANLEY & CO., Sharebrokers,

having at their command a very large SUM of MONEY for INVESTMENT, inform their friends and the public, they are prepared to make ADVANCES on the deposits of English or Foreign Railway or Mining Shares, upon exceedingly advantageous terms; they also BUY and SELL every description of STOCK at market has been made than usually charged.—5, Bank Chambers, City, opposite the Bank of England.

COMBARTON AND NORTH DEVON LEAD AND

SILVER MINES.—Notice is hereby given, that the GENERAL ANNUAL MEETING of the shareholders in the above company will be HELD at the Counting-house, on the mine, on Wednesday, the 18th day of August next, at Twelve o'clock at noon.

Dated Combarton Mine, July 22, 1847. C. R. WEBB, Secretary.

GREAT SOUTH TOLGUS MINING COMPANY.—Notice

is hereby given, that a CALL of TEN SHILLINGS per share has been made this day on each share, and that the same must be PAID on or before the 31st day of August next, to the order of the company, at Messrs. Child, Halliday, and Co., Bankers, London, or at the Borough Bank, Liverpool. By order of the Directors.

Dated Liverpool, July 22, 1847.

TRELEIGH CONSOLIDATED MINING COMPANY.—

A DIVIDEND (the second since May last) of SIX SHILLINGS per share—being 5 per cent. on the paid-up capital—has been this day declared, PAYABLE on Monday, the 2d of August, and on every succeeding Monday, between the hours of Eleven and Three o'clock. The Company, with a list, according to a form, which may be obtained at the office, must be left for examination three clear days previous to payment.

67, Old Broad-street, July 5, 1847. WM. NICHOLSON, Secretary.

UNITED HILLS MINE COMPANY.—Notice is hereby

given, that the ANNUAL GENERAL MEETING of the UNITED HILLS MINE COMPANY, adjourned from the 10th day of June, will be HELD at the office of the company, No. 5, Adam's-court, Broad-street, on Thursday, the 12th day of August next, at One o'clock precisely. By order of the board.

6, Adam's-court, Broad-street, July 22, 1847. JAMES SMITH, Secretary.

ASSAYING AND ANALYSIS.—MR. MITCHELL begs to

inform the MANAGERS, &c., of MINES, SMELTING-WORKS, and MANUFACTORIES, that he still continues to CONDUCT ASSAYS and ANALYSES of all PRODUCTS, metallurgical and manufacturing, at his LABORATORY,

23, HAWLEY-ROAD, KENTISH TOWN, LONDON.

to which address communications are to be forwarded.—Instruction in all branches of assaying and analysis as usual.

GEORGIA TIN MINES, divided into 2048 shares, and worked

ON THE COST-BOOK SYSTEM.

The necessary arrangements having been made for carrying out the operations of the company, all future communications are requested to be addressed to the offices of the company, 21, THROGMORTON-STREET, LONDON, where the specimens and plans with the correspondence, may be seen.

ADCOCK'S PATENT SPRAY PUMP.—This important

INVENTION having been PERFECTED, and brought into SUCCESSFUL PRACTICAL OPERATION at LANHIDDELL, at pits belonging to R. J. Blewitt, Esq., M.P., Llantrannam Abbey, near Newport, Monmouthshire, the PATENTEE is ready to RECEIVE, and to execute, ORDERS.—Apply to Henry Adcock, C.E., at his offices, 137, Strand, London, where pamphlets, descriptive of the invention, may be had; at the office of the Mining Journal, 45, Fleet-street; and through any respectable bookseller.—price 6d.

BRUNTON'S PATENT ORE-DRESSING FRAME.—

ACCIDENTS.

Rowley Regis.—A melancholy and fatal accident occurred to J. Woodhouse and J. Hurchall, two steady and industrious men, working at the pits of Mr. Hackett, Blackheath; it appeared that they had prepared a mine charged with gunpowder to blow up a portion of the pit, when, either from the effects of such explosion, or the mismanagement of the pit-pulley, by which they were drawn up, they were both killed on the spot.

Dudley.—G. Hibbs was killed while employed filling band in the Bumble-hole Colliery, belonging to the British Iron Company.

Rowley Regis.—G. Pearce, engineer at Mr. Batson's Colliery, Tivdiale, was killed while employed fixing some new trees in the water-pit.

Distressing Colliery Accident.—A sad colliery accident occurred at Mr. Hill's pit, at Abercannad, under, as near as we have been able to learn, the following circumstances:—In collieries there are stables underground, where horses are kept for many years, without ever facing sunlight. On Friday the 29th inst., as a boy was leading out one of the horses, it got restive, and, to manage him, the boy let him go. Finding himself free, the horse ran down an old heading, which had not been walled up. The boy informed the haulier of the circumstance, and was told to go and fetch the horse out. The boy refused, stating that "the agent in the heading" would be dangerous to go to the end of the heading with a light. "Nonsense," replied the man, "there is no danger," and he went, light in hand, to fetch back the horse, whereupon the explosion ensued, by which the hapless man and horse were burnt, but from the consequences of which the prudent boy escaped. There were two other men burnt, and one boy (Thomas Davies), 10 years of age, killed by having his skull shattered by concussion with the sides of the level. So great was the violence of the explosion, that several men were blown from their stations to a distance of from 10 to 15 yards, but escaped unhurt. None of the injured persons are severely hurt, and their survival is confidently anticipated. This should serve as an important lesson, and lead men to be more careful. Science can do much to obviate such evils as these, which we are sorry are of frequent occurrence in this district; but it cannot guard against personal foolishness, and in a rash persistence in breaking through prudent restraints. If our version is true, this imprudent haulier will have severe regrets, as well as painful sufferings, for these consequences are clearly referable to his rashness. We cannot, however, acquit the proprietor of blame. His agent knew it to be dangerous, and yet neglected to wall up the place. The names of the men were H. Hiss, L. Lewis, and J. Miles.—*Merthyr Times.*

Death from falling into a Coal-pit.—On Monday, an inquest was taken before Thomas Badger, Esq., at the Infirmary, on the body of J. Higginbottom, aged 25 years, of Gleadless-common, who died on Sunday morning, from having fallen into a coal-pit on the previous Wednesday night. From the evidence, it appeared that on Wednesday night the deceased, William Nutton, Samuel Ellis, and James Howson, were working at the end of Mr. Rhodes's pit, at Woodthorpe colliery. The deceased was working on the right, and went to his work at half-past seven o'clock in the evening. At about 11 o'clock, Nutton, the engine-walker, drew a cart out of the pit, and landed it at the top of the shaft, while the deceased pulled it out of the shaft. Nutton saw nothing more, but went to the engine-house, and while there he heard a noise in the pit, and, missing the deceased, he called out, but no answer came. He knelt down at the mouth of the pit, which is 60 yards deep, and asked Sampson Ellis, who was below, if the deceased had fallen into the pit. At the period of the accident, the deceased was at the bottom of the pit, very near the shaft, and was just going to pull the empty cart out of the chair at the bottom of the pit, when he heard a noise at the shaft, and he tried to run out of the way. The cart came down first, and knocked his light out. James Howson was with him at the bottom of the pit, and so he called out to him to come with his light. When Howson came, they saw the deceased lying at the bottom of the pit, unable to speak, and they expected he would die almost immediately. It was supposed that the deceased, after having taken away the full cart, had taken the empty cart from the shaft, instead of the full one, and that he had fallen down. The deceased was the first to break through, and there was a strong light burning in the fire-pit, at the top of the pit. The deceased was an unmarried man, and was perfectly sober at the time. The deceased reached the infirmary at two o'clock on Thursday morning; but, although every attention was paid to him, he died at midnight on Sunday. All the witnesses were of opinion that his death had been purely accidental, and the jury returned a verdict of "Accidental death from falling into a coal-pit."—*Sheffield Times.*

The Yew-Tree Colliery Explosion—Charge of Manslaughter.—*Staffordshire Assizes, July 23.*—John Love was charged with killing and slaying Noah Hodgkiss, John Marsh, Job Marsh, John Guy, and Aaron Edwards, on the 23d of March last, at Sedgley, by leaving a lighted candle in a coal pit, called Yew-Tree Pit, contrary to the regulations of the works, by which the foul air was ignited, and the death of the above persons occasioned. Mr. Greaves, with whom was Mr. Jackson, stated the case to the jury. Mr. Serjeant Allen and Mr. Meteyard defended the prisoner. It appeared from the evidence, that the prisoner had been taken on at the works, and on leaving worked at the air-handling where he had been working. The person who preceded him in that part of the pit, was George Glazard, an old workman, who, in his evidence before the court, stated that he told the prisoner that he must by no means leave the air-head without putting out the candle, until James Glazard came and began work. It appears, however, that George Glazard himself did, on leaving the air-head on Monday evening, to give place to Love, leave the candle burning, no one being near. He was absent, in company with a boy named Hickman, for 10 minutes, while he left the air-head, and went down the shaft along the gateway to the shaft, where they met Love, and before him, and told him to put the prisoner then ascended to the air-head, where he found the candle. Next morning, on leaving work, he left his candle burning, no one being in the air-head. The overlooker, Guest, seeing both Love and James Glazard, who were to go to the air-head to work, supposed that there was no light there; and, there being foul air in the gateway, he set on the five boys named to buffet it out. The foul air ascended the pump up to the air-head, where, meeting with the candle, it exploded, and the accident was the consequence.—The Judge, considering that the person who gave directions to the prisoner, was a perfect stranger, and not a person who could not support the charge. All parties agreed in this, and the prisoner was acquitted.—Mr. John Southam, a man of long experience as a mine bailiff, and who examined the state of the workings shortly after the accident, spoke in the strongest terms of the highly satisfactory mode of ventilation adopted in the mine, having never seen one better ventilated. Mr. Moses Taylor and Mr. John Yardley, also experienced mine bailiffs, attended to give evidence to the same effect; but the learned Judge expressed himself, that from the plan of the workings which had been submitted to him, and the evidence adduced, it appeared to him that a perfect system of ventilation was adopted in their mine; indeed, nothing to the contrary had been alleged, the accident clearly appearing to have been caused by the prisoner having left a lighted candle in the air-head where he had been at work. His Lordship would, however, recommend the masters of mines to have regulations printed for the guidance of the workmen.—*Birmingham Journal.*

THE GUN-COTTON ACCIDENT.—It was not to be expected that a chemical preparation of such terrific power and treacherous uncertainty as gun-cotton, could be introduced to the world, as an agent of technical utility, without its advent being commemorated by frequent and severe accidents. It is one thing to prepare a dangerous chemical compound in a laboratory surrounded with every appliance, and guarded by the chemical operator with scrupulous care—it is another thing to perform the same operation on an immensely larger scale in a workshop, where even women and children ply their busy occupations, within the very jaws of death. We were prepared to contemplate some terrific accident from an explosion of gun-cotton, so soon as we found that the article had become in general demand for the purpose of blasting rocks; but the recent accident at Faversham (see *Mining Journal* 10th and 17th inst.), cascades in magnitude any casualty from a similar cause which our fears had ventured to contemplate: 30 human beings have been hurled into eternity—the fragments of three have been so scattered by the terrific agent that no remnant of them can be found, and other sufferers are expected to die. One individual was found killed by inhalation of noxious vapours whilst engaged in the heroic cause of rescuing the sufferers from the destructive wreck. Trees have been lifted by the roots—a large mound of earth has been removed bodily—houses within a large circuit have been unroofed, and the entire vegetation of the district destroyed. The Faversham accident, from its magnitude, from its terrific consequences, casts all other accidents from gun-cotton into the shade; although there is at least another which merits the attention of all who desire to speculate on the causes which may dangerously affect the explosive substance under investigation, and render its management more safe in future. We allude to the late explosion of the gun-cotton concrete-rocket at West Ham. In connection, therefore, with both these instances, we purpose making a few remarks. It is to be regretted, perhaps, that the extreme violence of gun-cotton in its exploding state, and its readiness to explode, have led to its general adoption for that purpose, before its chemical composition, or rather the chemical equilibrium of its elements, has been so inefficiently determined—before even we know with certainty the precise temperature at which it explodes. The discovery of gun-cotton has been an affair of such recent date, the number of chemists who have turned their attention to it so comparatively small, that time has not yet been given for the collection even of such facts as might be usefully brought to bear in rendering the substance more manageable, in determining the cases which might lead to an explosion, or, in other words, we may say—and appeal to the united testimony of all chemists whose attention may have been directed to the circumstance—that, of all the substances more explosive than gunpowder which were known anterior to the discovery of gun-cotton, there is scarcely one which can be said to have a definite calorific point at which it explodes—which, in fact, may not, and has not, exploded without any assignable cause, or, as it has been termed, spontaneously. In proof of this position we may begin with the most terrible, perhaps, of all the explosive bodies known—the chloride of nitrogen; a substance which, even chemists, in its crystalline state, is so explosive; which, if thrown upon a very hot pipe, or into a fire, does not explode at all, but which, on touching a plate less hot, or the slightest particle of oil, resin, or the like, shatters to atoms, bends, or tears, with a violence which is not of incredible, but is so, that it is unmanageable. Again, there is the so-called iodide of nitrogen, which, although less dangerous, is not less capricious, nor less incapable of being rendered amenable to any certain law, as to the time or circumstances of its explosion. Then there is the fulminating silver—not the comparatively innocent white fulminate, but the ammoniacal fulminating silver; a compound so dangerous, so liable to undergo the so-called spontaneous explosion, that few persons have now the hardihood to make it, much less to experiment with it. The same fulminates, although not so dangerous, are nearly as unmanageable; and so are the fulminates of silver and mercury; nay, even the mixture of chlorate of potash and sulphur—formerly used, but not at the present time, for charging percussion caps. Indubitable instances, and by no means infrequent ones either, are on record to prove that these bodies have all at different times exploded, apparently, from a spontaneous breaking up of their internal elements rather than from any external cause. Indeed, the operation of internal molecular influences is far more potent than we are prepared at a first glance to believe; and may be recognised in numerous cases where the attraction of affinity may be supposed to be strong. If, then, these so-called spontaneous explosions be well proved to have occurred, in connection with all the longer-known and better-studied explosive bodies of chemistry, let us now ask, whether there should seem to exist any reason why gun-cotton may differ in this respect from the rest? Not only will the speculative chemist assign a negative to this answer, but more than this, practical inquirers will often many reasons why gun-cotton should be subject to more than ordinary chances of casualty from explosion.—*Pharmaceutical Times.*

MINING ENTERPRISE IN PEMBROKESHIRE.—A company has been formed, with a capital of 100,000l.—60,000l. of which has already been subscribed—for the purpose of establishing four blast-furnaces, for smelting iron ore, at Wiseman's Bridge, in the parish of Amroth.

A DREADFUL ABSCESS UNDER THE CHIN CURED BY HOLLOWAY'S OINTMENT AND PILLS.—Robert Davidson, shoemaker, of Anstruther, had suffered more than five years with a very dreadful abscess under his chin. During this time he had been under the care of two surgeons in Anstruther, and one in Edinburgh, without the least prospect of a cure. In this miserable condition he began to use Holloway's ointment and pills, which, in the short space of two months, soundly healed the wound, and he is now enjoying the best of health. These fine medicines are admirable remedies for king's evil, wounds of all kinds, burns, scalds, piles, fistula, and bearings down.—Sold by all druggists, and at Professor Holloway's establishment, 244, Strand, London.

THE GREAT WELSH COLLIERY DISPUTE.

VICE-CHANCELLOR'S COURT, JULY 27.

THE DUKE OF BEAUFORT v. MORRIS.—His Honour delivered judgment in this case. The object of the bill was to restrain the defendants, Sir John Morris, Bart., and Mr. George Byng Morris, from doing certain acts in their mines, by which the water thereof would flow into that of the plaintiff. The Duke and his eldest son, the Marquis of Worcester, are interested (the one as tenant for life, the other in remainder) in a mine in Glamorganshire, called the Landore Mine, which is situated in the centre and the lowest part of a basin-shaped tract of land. Adjoining to this is the Pentre Mine, belonging to the defendant, Mr. George Byng Morris, and beyond this another, the property of a Mr. Phillips; and further on, another mine, called the Cae Grobos, of which Mr. George Byng Morris is the proprietor. On the other side of the Landore Mine, and adjacent to it, was the Drew's Pit Mine, beyond which flowed the river Tawe, adjoining which was another coal mine, called Llynwedd. Drew's Pit and Llynwedd collieries both belonged to Mr. Morris, who, until 1848, was tenant, under the Duke of Beaufort, of the Landore Mine. During Mr. Morris's possession, communications existed between his several mines, the water contained in them pouring into the Landore Mine, the bottom of the basin, from whence it was pumped by a powerful engine. Since the expiration of the lease of the Landore colliery, Mr. Morris has continued working his mines at Cae Grobos and Llynwedd. The Duke complains, that the communication made between the Llynwedd and the Drew's Pit, not only brings down to the Landore the water of the former mine, but that, inasmuch as it passes under the river Tawe, that river will probably break through the bed of the river, and flow into the Pentre Mine, belonging to the Landore colliery. The engine at this colliery has not been worked since the latter end of 1845, when Mr. Morris's lease determined, and the mine is filled with water, which the Duke of Beaufort proposes to pump out, but considers that it would be useless to do so, until he has compelled Mr. Morris to stop all communication between his mines and that of the Duke's. This was substantially the object of the present suit. An injunction had been granted to restrain Mr. Morris from working his mines detrimentally to the plaintiff, but the case coming on for hearing, it was asked that the injunction might be made perpetual.

His Honour, after going through the facts of the case very elaborately, said, that he remained of the opinion thrown out at the conclusion of the argument—that the only order which he could make, according to the practice of the court, was to retain the bill for a year, with liberty to the plaintiff to bring such action as he might be advised; the defendant, upon the trial of the action, to admit that a drift or communication between the Pentre Mine and the Cae Grobos Mine had been made, and that the water from the latter had, by such drift, been carried into the former, and that the water from thence flowed down into the other mine. As Sir J. Morris appeared to have been made a party unnecessarily, having merely a legal interest, the bill must be dismissed as against him with costs.

THE IRON-WORKS AT MERTHYR, SOUTH WALES.

Merthyr is like an American city—the creation of yesterday. Its name thus originated: a Welsh prince named Brychan, who appears to have embraced Christianity, retired thither towards the end of the fifth century, with his son Rhun, and daughter Tydvil. They were soon assailed and murdered by a body of Saxons and Irish Picts; and a church, which was subsequently erected on the spot where they were put to death, was dedicated to Tydvil the Martyr—hence Merthyr Tydvil. A castle called Morlais, the rude remains of which are to be traced on a hill about three miles to the north-east of the town, was subsequently erected by Gilbert, Lord of Glamorgan, on the site of an early British camp, as an outpost on the frontier of the Lord of Brecknock, a turbulent neighbour. The modern history of Merthyr dates from the middle of the last century, about which period the importance of preparing iron by means of coal had been fully demonstrated. In 1785, Mr. A. Bacon, subsequently member for Aylbury, obtained, in conjunction with some other individuals, a lease for 99 years, of a mineral tract here about eight miles long and four broad, full of valuable coal, and iron ore. Shortly before the commencement of the American war, Mr. Bacon erected a smelting-furnace and forge, for making bar-iron at Cyfarthfa; and afterwards, having been successful in obtaining a contract for supplying the Government with cannon, put up a foundry and works for that purpose. The contractor reaped a large fortune by his bargain; but the Carron Company in Scotland obtained a renewal of the contract just before the close of the war. In 1788, Mr. S. Hargreave took a lease of a portion of this country; but, owing to some disagreement with Mr. Bacon, soon disposed of it to Mr. Tanner, of Monmouth, who, in turn, sold his interest to Mr. R. Crawshaw, who was practically acquainted with the iron trade. Mr. Hargreave established, in 1784, the Pen-y-Darren Works, which were a source of very great profit; and a few years afterwards he was the projector of a canal to Cardiff, which, however, was constructed under the direction of Mr. R. Crawshaw. Mr. Hargreave having retired from active life in consequence of some misunderstanding with the gentlemen with whom he was associated in carrying out these improvements, the Plymouth works were now in operation; and before the end of the century Mr. R. Crawshaw became, on the demise of Mr. Bacon, the owner of the Cyfarthfa works, which he rapidly extended. The rise of Merthyr has subsequently been fluctuating—its inhabitants, like all communities dependent on trade, having had to encounter periods of severe depression. The census return, in 1831, was 22,063; in 1841, 34,977; and it is believed that in 1847 the number is at least 45,000. The parish runs for a distance of 10 miles from north to south, and is on an average three miles broad. The parish of the Vale of Taff, and its dependencies, must now amount to nearly 100,000 persons.

In the year 1847, the place is in a state of the highest prosperity. There are now four iron-works in operation—viz.: the Dowlais Works of Sir J. Guest and Co., at which there are 19 blast-furnaces; the Cyfarthfa Works of Messrs. Crawshaw and Sons, at which there are 13 furnaces; the Pen-y-Darren Works of Messrs. Thompson and Co., at which there are six furnaces (this firm possesses two other large iron-works); and the Plymouth Works of Messrs. Hill, at which there are eight furnaces. There are always some furnaces out of blast. Messrs. Crawshaw also possess the Herwain Works, six miles from Merthyr, at which there are four furnaces.

The Plymouth Works are seen to the right of the Taff Vale Railway, shortly before reaching the station from Cardiff; the Pen-y-Darren Works stand near the commencement of the long delf which leads up to Dowlais; Cyfarthfa is situated on the outskirts of the town, near the Neath and Hirwaun road.

The Cyfarthfa Works form one of the most perfect examples in existence of an immense manufacturing establishment. Although, including colliers, upwards of 4000 men are employed, such is the admirable disposal of the buildings and machinery—the vastness of which must be seen to be comprehended—that there appears to be no bustle; the whole of the complicated operations seem to go on with the regularity of the action of a watch. But, it is necessary to walk up to Dowlais to obtain a clear idea of the character of this great seat of the iron trade. And here let us say a word or two about the position of Merthyr. The town, which mainly consists of workmen's houses, is of an irregular form, and lies in the midst of a group of bleak mountains; Dowlais occupies the upper part, and is approached by a long street stretching for considerably more than a mile, up a steep ascent beyond the Pentre mine, which is a black valley blocked up to a great extent by enormous black banks of clinders, &c., compared with which the largest railway embankments are mere pigmies. Additions are, of course, constantly being made to these banks, and it appears to a looker-on to be a hazardous operation to bring a horse and tram close to the edge of the lofty ends or tips, for the purpose of shooting the contents over the precipice. As the tips in progress are formed of hot clinders, they are on fire from nearly top to bottom—glow like lava. Rivulets of hot water—once a sylvan trout stream—wash the sides of these gloomy mountains, and descend in broad day-light, but when viewed at night it is wild beyond conception. The mind also the reality—gives vastness and sublimity to a picture lighted up by a thousand fires. The vivid glow and roaring of the blast-furnaces near at hand—the lurid light of distant works—the clanking of hammers and rolling mills—the confused din of massive machinery—the burning headlands—the coke hearths, now, if the night be stormy, bursting into sheets of flame, now wrapt in vast and impenetrable clouds of smoke—the wild figures of the workmen, the actors in this apparently infernal scene—all combine to impress the mind of the spectator with a very powerful effect.

A sketch of the processes carried on in the works would involve much dry technical detail. Merthyr is one of the great seats of the bar-iron trade; and so extensive are the rolling-mills, now almost exclusively occupied in the production of railway bars, that it is found necessary to import a quantity of pig-iron, chiefly from Scotland, to supply the demand, as well as large quantities of iron ore of various qualities. The exports at Cardiff afford an idea of the extent of the iron trade; but the quantity of iron produced is of course much larger. The chief firms sometimes accumulate large stocks, which they work up when times are very prosperous. The waste of these furnaces varies greatly according to circumstances, and according to the quality of iron produced. Thus, a furnace that will make 120 tons of pig-iron, is not capable of producing more than 65 tons of foundry iron. The average make of pigs at Dowlais (where no foundry is made), amounts, we believe, to between 80,000 and 87,000 tons of pig-iron per annum; the average make of pigs at Cyfarthfa and Hirwaun somewhat exceeds 60,000 tons. The strata of coal are of excellent quality, accompanied by parallel veins of argillaceous iron ore, which penetrate to a great depth, and yield an average of about 35 parts of metal out of 100; the mines are worked by levels. There is no blackband in this neighbourhood.

In 1847, the rate of wages is nearly 40 per cent. higher than it was two years previously, owing to the advance in the value of iron; yet the workmen are dissatisfied, and there have been many mutterings about a strike. The variation of wages in the mineral districts is very great. An average is struck every five or six years, at periods when wages are at the lowest; but it is so difficult to arrive at accurate conclusions, that we shall only give the present rates. Colliers earn from 3s. to 5s. 10s. per month, averaging about 1l. per week; mine carpenters 18s. per week; furnace-men at the blast-furnaces, 30s. to 35s.; rollers and puddlers, from 25s. to 35s.; ballers, from 20s. to 45s., averaging 30s.; rollers, from 25s. to 35s., in a few cases, 50s., averaging about 50s. per week. The average earnings are considerably reduced through the hill country of Glamorgan and Monmouth by intemperance, which leads to much loss of time.

Aberdare, which is connected with the Taff Vale Railway, by a line and branches, 44 miles long, has long been famous for its iron-works and its collieries. There is also a canal. The scenery of the Vale of Gynon, through which the fine runs, is charming. The progress of Aberdare during the last few years has been so great, that there is a prospect of it ultimately becoming a second Merthyr. There are now eight blast-furnaces in operation, six of which belong to Messrs. Thompson and Co.; and in the spring of 1847, Mr. Crawshaw Bailey commenced new iron-works on a very extensive scale. The Aberdare Railway, which joins the Taff Vale line at the foot of the incline, at which point it will be met by the Newport, Hereford, and Aberdare Railway, was sold to the Taff Vale Company, on an estimated dividend of 10 per cent., a proof of the extent of the traffic. Population of Aberdare, 10,000; church accommodation, 300.—*Chiff's South Wales.*

In the 17th century, and no doubt earlier, rude attempts were made to smelt iron ore here. In the former a small work was founded at Pen-y-Darren, at which the bellows was worked by a water-wheel. Charcoal was used instead of coke, hence the destruction of the woods which formerly covered the head of the Taff Vale.

The Quarryman.

The sun has seen him all day long,
The old hedge-row thorn beneath,
His frugal meal with gladness brings,
Over field and breezy heath.
Again he seeks the ponderous rock,
And he strikes with giant might;
The work of ages feels the shock,
And it rushes into flight.
Thus dashing on, unwearied still,
What a lesson in him lies—
Such steady toil and earnest will,
It shall even instruct the wise.
His time is measured by the sun—
Now he halts in his western ray;
Another hard day's toil is done,
And he whistles on his way!

—*Leicester Mercury.*

THE ELECTRIC TELEGRAPH COMPANY.

This company and its operations, of which we gave some notice in a previous Journal, is now so far progressing to maturity that it becomes of considerable importance to the public. The spacious building now erecting in Lothbury, on the side of Founder's Hall Chapel, the old baths, &c., is perhaps in a situation not to be surpassed in London, for convenience, and its centrality. In the immediate vicinity of the Stock Exchange, the Bank, and all the great congregating localities of this mighty city, it will be enabled to furnish the most important information at a moment's notice to the most distant towns; and, from being in connection with all the railways out of London, its conducting powers will be eventually ramified to every locality in the kingdom. As the offices in the Strand were only engaged for temporary use, the ground in Lothbury has been purchased. The building will be spacious and lofty, in a splendid style of architecture, and will be so arranged as to meet the wishes and convenience of all parties anxious to send or receive immediate information. It will be lit by a lofty skylight—the whole of the walls being required for the various compartments, which will be named with the district in which it is in communication; above these compartments are three tiers of galleries, completely round the building, in which are the various telegraphs in communication with the numerous railways and towns throughout the kingdom. The following will be the *modus operandi*—A communication being required to be sent to any distant town, the party would write it down, and take it to the clerk in the proper compartment; he would mark and number it, according to the station to which it is directed: a raising apparatus in constant operation, worked by machinery, on which the paper is placed, at once carries it to its proper telegraph in one of the galleries. The person stationed there immediately makes the necessary communication; and, if the party should happen to be on the spot, the answer may be received in about four minutes. Under other circumstances, messengers will be dispatched to the residence of the party communicated with, and it will thus establish an almost miraculous system of rapid postal convenience.

The wires will be laid through the streets from the several railway termini to Lothbury; they are of galvanised iron, or iron wire coated with zinc when in a state of liquidity, enclosed in 1-inch or 1½-inch iron tube, and isolated by the tube being filled with melted pitch. In case of fracture, and thus a stoppage of the telegraph in that particular direction, the tubes are laid near the surface, and traverse iron posts at every 300 yards; by a magnetic current applied at these stations, it can instantly be ascertained between which two posts the fracture occurs, and can be thus repaired. From 30 to 40 words can be transmitted to any distance in three minutes; the current of electricity is instantaneous, but the manipulation of spelling the words causes the delay. The company, however, have a new machine constructing by which from 1000 to 2000 letters can be signalled in one minute to any distance. This is to be effected by a combination of galvanism and steam power effecting the indication, and steam supplying the motive power. The mode of communication by this instrument will be effected by rapidly running, by means of steam, a long slip of paper, of about an inch in breadth, over a coil, through which the electric current would pass to two metallic points connected with the wire, if it was not intercepted by the paper, which is a non-conductor. Where it is intended to send a message, a narrow slip of paper is perforated in double columns with combinations of long or short holes, and this is done in such a way as to give a different sign or mark for each letter of the alphabet. Of course, previous to sending a message, it is necessary that each letter of the message should be separately stamped out of the paper, and this is easily effected by means of the steam power. On the top of this perforated paper the two metallic points connected with the wire rest; they are prevented taking up the electric current from the coil wherever it is covered with the paper, but in its rapid movement the points are constantly being brought in contact with the metallic surface of the coil, and they thus take up the electric current through each perforated space, and it instantly passes to the other end of the wire, at however great a distance it may be. At the extremity of the line there is a similar apparatus to receive it, and upon which a narrow slip of blue paper is rapidly passed. The termination of the wire rests on this paper, and whenever the electric current passes from it, it produces a discolourment of the paper in small red spots, and in such a way as to form combinations coinciding with the perforations made in the paper at the other end of the line. The clerk or compositor has then to decipher this message, and it is either copied into writing or at once put into type. This instrument is intended for long messages, public news, &c. The building is most rapidly progressing, and we shall watch with much interest for its completion.

SWING-BRIDGE ON THE AMSTERDAM AND ROTTERDAM RAILWAY.—In a country such as Holland, where hitherto all internal traffic has been carried on by canals, many obstacles necessarily presented themselves to a complete development of a system of railways. The ground nearly everywhere is of such a treacherous nature, that the fact of getting good foundations for any solid and heavy superstructure, is a matter attended with great expense and considerable difficulty. Another obstacle that presented itself was the crossing of navigable canals, and the means to be adopted, so as not to interfere with that traffic. This, consequently, called forth the ingenuity of the engineer, the result of which we now place before our readers. The bridge is the design of the Chevalier Conrad, the engineer of the Amsterdam and Rotterdam Railway, to which he gives the name of crane-bridge, *pont à grues*, in opposition to that known in England as a swing-bridge. Literally the name is true, as the iron girders are nothing else than eight cranes, four on each side, corresponding to the four lines of rail, and so fastened together, that by the application of wheel machinery to one side, the whole framework falls back in a line parallel with the pier, leaving a sufficient opening to allow a vessel fully rigged to pass easily together. The same machinery is used to bring the series of cranes together again, when a few bolts, or catches, suffice to retain them firmly in a position, that trains may pass over in perfect safety. Mr. Conrad states, that bridges on this construction are attended with little or no vibration on the passing of a train, and that they are worked with ease and precision.

FAIL OF ANOTHER BRIDGE.—On the evening of Thursday last the bridge in course of erection over the Tweed at Ashystead, fell with a tremendous crash into the water. The ruins of it now lie like a vast dam across the Tweed, with only a narrow outlet in the middle, through which the water passes. The whole wooden framework supporting the arch was literally smashed to pieces. No individual saw the bridge fall, the workmen having all left it a short time before. Mr. J. Smith, one of the architects, had just examined it, and seen nothing wrong. The cause of the accident is not properly ascertained. The arch, which was 135 feet span, and constructed entirely of whinstone, was a double one; both arches were finished, and they were putting on the balancing. Some attributed the accident to the haunches or outer ends being over-loaded, but this is mere conjecture. We understand Messrs. Smith have commenced active operations to have it rebuilt this season on the same gigantic scale as at first.—*Border Watch.*

THE ATMOSPHERIC PRINCIPLE.—The *Western Times*, in an account of its visit to the further opening of the South Devon Railway, thus notices the present state of the atmospheric workings:—"On our return we staid at Starcross for an hour, and had a look at the atmospheric engine, which was stopped for repairs. Everything was painted as *concolor res*—the atmosphere is still as highly thought of as ever—but the grease does not act with certainty—that is, it is still a question of valve. The grease with white lead in it hardened, and did not act. Last Friday they had a trial with a capital grease, which answered very well till it clogged up, and that did not do. The other day we passed up the Croydon line, and saw the pipes all lying along the side to be sold, and we thought of the many sovereigns worth of wind that had whistled through them to the tune of money out of both pockets, and none coming in. We suggested at the outset here, that the experiments ought to be limited to a particular part of the line, till the right mode should have been discovered. We venture, on behalf of the shareholders, to repeat that advice. The casting of pipes ought to be stopped, the erection of houses ought not to be proceeded with, till means have been found to work the portion already supplied with atmospheric apparatus—with certainty. Let the work of the line be done with certainty for a single week, and public confidence will be restored. We have every respect for the feelings of the scientific gentleman engaged in the attempt to discover the true atmospheric principle—but from the repeated failures, it would really appear that he is not on the right track, otherwise it would not still be a question of valve—flying is only a question of wing—we know the principle, good Constant (don't we), and only give us the right kind of wing and we'd be over Dartmoor and back to morrow. But till the question of valve be solved—would it not be prudent to limit experiments to a given portion of the line? From the top of the engine-house the views are magnificent."

RIVER WEAR VENT.—In the half-year ending June 30, 1847, the quantity of coals and cinders charged with river-duty at Sunderland was 282,9504 chaldrons;—used for home purposes, and exempt from duty, 16,298. The vessel exceeds that of any corresponding half-year, for at least the last 22 years.

ENGINEERS OF STEAM-VESSELS.—The Admiralty have appointed Mr. J. Dimes an engineer-in-chief at Portsmouth, and directed him to be received in her Majesty's ship *St. Vincent*, as superintendent of all engineering works required in the squadron; he is to rank as a commander, and wear the uniform of that officer, and be paid 825l. per annum. This is the first appointment which has been made on the new system.

Mining Correspondence.

ENGLISH MINES.

BARRISTOWN.—We are getting on well in sinking flat-rod shaft under the 28 fm. level; it is down about 6 fms., the ground presenting very much the same appearance as the lift above. In the 18 fm. level we have discovered a part of the lode north of the slide, and also north of any of our previous workings on the lode; it continues pretty regular for 2 fms., and it is then cut off by another slide, leaving it a detached section of the lode, of about 2 fms. between two slides; it looks well for ore, and holding its regular east and west course; the 18 fm. level end, west of flat-rod shaft, is worth about 160 per fm.; the rise behind this end is worth about 180 per fm. We have just completed 60 fms. of tramway in this level, to facilitate our drawing. The 12 fm. level end west is worth 60 per fm.; the slopes on middle lode, under the 12 fm. level, are worth about 120 per fm. The winze sinking under the 18 fm. level on this lode, has to be suspended for the present, for want of air. The adit end east is being pushed on with all possible dispatch, to hole to Nangle's shaft. At Clon Mines we are still coasting, without any material discovery. We have engaged the Joseph, of Wexford, to take 40 tons of ore to Holywell; she has not yet arrived here, but is expected daily; she will not be delayed here longer than to take in her cargo.—T. ANGOVE; G. WHITE; July 23.

BEDFORD UNITED.—At Wheel Marquis, the lode in the sump winze is 4½ ft. wide, and worth from 80 to 90 per fm.; in this level east, the lode is 3 ft. wide, and worth 150 per fm.; and in the slopes in the back of this level, the lode is worth 180 per fm. The lode in the 70 fm. level east is 2 ft. wide—saving work, and looking more kindly than for some time past; the winze in this level is suspended for the present, on account of water, and the men are now engaged cutting ground in the 80 fm. level, west of the sump-winze, for sinking a winze. There has been no lode taken down in the 58 fm. level east. At Liscombe, the lode remains without alteration in the adit level, or rise in this level. The lode in the south engine-shaft and adit level are without important alteration.—J. PHILLIPS; July 27.

CALLINGTON.—In the 125 fm. level, south of Johnson's engine shaft, the lode continues to produce good work, about 1 ft. wide. The men belonging to the north end are removed from the same, and put to rise against the winze sinking below 112; the lode is 1 ft. big, work of average quality. In the 112 north, the lode is small, intermixed with silver-lead ores; in the south end, the lode has not been taken down; we have cut into the same about 6 in., and find it very good work. In the 100 north, no lode has been taken down; in the south end, the lode is small and poor. In the 90 north, we have driven through the elvans; the lode is 10 in. big, work of a moderate quality. We are sinking a winze from the 80 to communicate with this level; no lode taken down. In the 100 fms. level, south from the north engine shaft, the lode is 10 in. big, good work; in the north end, we have a lode going down worth 150 per fm.; the back of the level is poor. In the 90 fms. level south, the ground is rather hard, lode 1 ft. big, composed of iron and silver-lead ores. In the 80 south, the lode continues poor. In the 70 east, we are not yet through the great cross-course—have driven about 5 fms. in the same. The air in this place is very deficient, not allowing us to proceed so fast as we otherwise could; on some occasions, when the men cannot work here, they are employed driving the 70 north, where the lode is about 6 in. wide, intermixed with silver-lead ores, the back will pay for working in a high tribute. In the 40 north, we are through the elvans, the lode is here by the last east and west course; to the east of the cross-course at this level we have met with a branch having a south underlie containing munda. We intend sampling to-morrow a small parcel of copper ores (about 16 tons), the value of which shall be sent you when we receive the assay; and on the following day about 107 tons silver-lead ores. At Kelly Bray we have driven 4 fms. In the cross-cut, and intersected several fine dropers falling into the lode, one of them 6 in. big, composed of munda, spar, and hard yellow ore, very promising. The shaft is sunk 3 fms. below the level. In the shaft sinking on the course of the lode no alteration has as yet taken place.—J. T. PHILLIPS; July 26.

COATLITHE HILLS.—The level east from A shaft has been driven about 4 ft. during this week, and the vein in the end is much the same as when I last wrote. The horse level has been driven about 1 fm. during this week.—J. M. PAULL; July 24.

CUBERT.—The ground in the engine-shaft continues much as usual; we are, however, getting on with the sinking as well as can be expected. The lode going east and west in the 35 fm. level, is 2 ft. wide, composed chiefly of spar and munda, and yielding good stones of lead; both are promising levels, but at present not rich. The lode in the eastern end, in the 25 fm. level, is 2½ ft. wide—kindly end, and producing about a ton of lead ore per fm.; in this level, driving south, we have this day just cut into the middle lode, but cannot yet say anything about its size or quality. The ground in the new shaft is improved, being now a soft blue killas, mixed with bunches of spar and lead; sunk from surface between 8 and 9 fms. Nothing new to notice in the tribute department.—R. ROWE.

DAFTMOOR CONSOLS.—We have finished our lobby to the wheel-pits and are making great progress in our wheel-pit, as well as the deep adit; we have also commenced cutting a new piece of lead, so as to bring another never-failing stream of water over the wheel; and all our other work is going on most satisfactorily. The weather being fine, we are using every effort possible to finish our grass work before the winter season comes on. Our new 60-foot wheel will be completely sheltered from the severity of the weather, as well as 25 fms. of rods, which will be underneath; this will be better understood on inspection; no frost or snow will take any effect on it, or be the least hindrance to our work, and we shall have sufficient supply of water both winter and summer. We have commenced clearing out and repairing the smelting-house.—T. GREGORY; J. SCARROD; July 29.

DEAN PRIOR AND BUCKFASTLEIGH.—There is no material alteration in the deep adit level, driving west, since my last report; we shall commence driving north in the course of a few days, in order to prove the north part of the lode. In the 10 fm. level, under adit, we are at present driving on the south part of the lode. In the bottom end, driving west, the lode is about 2½ ft. wide—a kindly lode. The lode in the pitches, from the 10 to the 20 fm. level, at present is poor; but in the pitch in the back of the 10, the lode is 5 ft. wide, and producing some good work for copper.—H. CHOAKE; July 27.

DEVON AND COURTENAY CONSOLS.—The lode in the 30 fm. level, driving east from cross-cut, is 3 ft. wide, composed of peach and munda, with good favourable ground on each side of the lode; in the end driving west, in the same level, I cannot tell the size of the lode, as the men have not cut through it; since they got through the slide in those places where they have cut into it, there is to be seen some branches of spar, with spots of ore, of good quality. In the deep adit level, the lode is composed of killas and spar, with some spots of ore. In the shallow adit level, on the north lode, the lode is 2½ ft. wide, composed of white iron, munda, can, and spots of lead ore. The shaft-men have completed their bargain, and commenced sinking.—N. SKEOBBICK.

DRAKE WALLS.—This mine, in all respects, is much the same as to prospects, as when you were here on Monday last. We shall sample on Monday next 16 tons of tin, for the last four weeks; and, from present prospects, we shall exceed that quantity next month. We have resumed the sinking in the eastern part of the mine, below the old men's workings, and are down to water, and fear little can be done to this part of the mine, without the deep adit being brought home, or machinery to draw the water.—July 10.—The slopes throughout the western part of the mine are looking well. Brenton's engine-shaft is improved for tin in sinking, particularly going west. No alterations in the eastern part of the mine worth notice. The Plantation shaft is down to water; we have sunk about 8 ft. No improvement on the branches. We calculate on sampling 18 tons of tin the 12th August—one month's raising.—R. WILLIAMS; July 26.

EAST CROWDALE.—We have sunk in our engine-shaft the past week 3 ft. 6 in., and I am sorry to state, we have had the misfortune, on Thursday night, to break the windrose of the sinking lift, through the firing of a hole in the shaft; the ground continues just the same that it has for some time since; we should have sunk near 6 ft. this week had it not been for this accident. In the adit level, towards the Rix Hill lode, the ground is harder than it was when last reported upon, the killas being laced up with branches of spar; it is now driven 46 fms. 4 ft. Our engine and pitwork are in good order.—S. PAULL; July 26.

EAST TAMAR CONSOLS.—The lode in the 54 fm. level north is 2½ ft. wide, composed of fluor-spar and silver-lead ores—a very promising lode; the lode in the same level south is 20 in. wide—good saving work. The lode in the 46 fm. level north is 20 in. wide—fluor-spar and lead ores; the lode in the same level south is 18 in. wide—good work. The lode in the 38 fm. level south is 16 in. wide—good work. Charlotte's is much the same as last reported.—B. ROBINS; July 26.

GREAT MICHELL CONSOLS.—In the 35 fm. level, east of the engine-shaft, the lode is producing good stones of ore; in this level west the lode is composed of fluor, munda, spar, and rich stones of ore. In the winze, sinking below the 22, west of the engine-shaft, the lode has a very promising appearance, producing rich stones of grey and yellow ore.—T. RICHARDS; July 26.

GREAT WHEEL MARTHA.—The lode in the end, going west in the 40, is divided in two parts by a horse of killas; the north part is about 2 ft. big, composed of capel and munda, spotted with ore, and carrying a white killas on the north, with munda heads, and which is very congenial for copper; the south part is 5 ft. big, composed of spar, capel, munda, and a little ore, and has a more kindly appearance now than I have seen since it was first cut through; we have now sufficient room to put six men to drive east, which I should recommend doing immediately. There is still 6 ft. of water in Thomas's shaft, which has been sinking very slow the last few days, but we have to-day drawn to surface the 20 fms. of 9-in. pumps. There is no alteration at Sherall's since my last; the lode still continues its size, and is composed of capel, spar, and a small quantity of tin.—T. PENALUNA; July 24.

GUNNIS LAKE.—At Chillsworthy, the lode in Bailey's engine-shaft is 2 ft. wide, and without alteration. In the 12 fm. level west, driving north on the cross-course, we are led to believe, from increased water issuing from the end, that the lode is not very far distant.—W. RICHARDS; July 27.

HAWKMOOR.—The lode in the 15 fm. level, east of Hitchins's shaft, is about 2 ft. wide—capel, spar, munda, and spots of ore.—P. RICHARDS; July 27.

HEIGNSTON DOWN CONSOLS.—The lode in the 20 fm. level, west of North shaft, is 2 ft. wide, composed of peach, gossan, and tin; and in this level east the lode is 2 ft. wide, producing good stones of tin—a strong promising lode; the lode in the pitches, in the back of this level, is yielding good returns. The engine went to work yesterday, and its working gave general satisfaction. We are now actively engaged laying down dressing floors, so that we may commence the pile of tinstuff broken and at surface.—W. RICHARDS; July 27.

HOLMBUSH.—We are making great progress in sinking the diagonal shaft, the ground in which is still favourable; the branches we had in it (some time since), with the exception of two, have passed through it, underlying south: the two branches that are at present in the shaft, are composed of spar and stones of ore—also underlying south. The lode in the 120 fm. level, west of the great cross-course, is 15 in. wide, composed of spar, munda, and stones of ore; the lode in the same level, east of Hitchins's shaft, on the north part, is 8 in. wide, composed of munda and spots of ore. The lode in the rise above the 110 fm. level south, is 20 in. wide, composed of spar and stones of lead—saving work, and opening tribute ground. The lode in the 100 fm. level south is 2 ft. wide, composed of spar, prian, and stones of lead—worth 50 per fm. We are daily in expectation of intersecting the flap-jack lode. The strata in the present end is white killas, which is very congenial for copper. The pitches in the back of this level are still producing a fair quantity of lead.—W. LEAS.

ILAM.—We have broken some good stones of copper this morning from the lode in the 42 fm. level, west of Robins's shaft. We have suspended driving the 67 fm. level west, towards Brown's shaft, for the present, and the men are put to drive a cross-cut from the bottom of Robins's shaft, in order to cut Brown's lode, as Captain Bonnell and myself do not think the lode we have been driving on is Brown's lode.—JAMES SPRAGUE; July 27.

KIRKCUDBRIGHTSHIRE.—A little increase of top power has enabled us to resume driving the 40 west—the lead in this end is about 1 ton per fm. The lode in the 30 and west is not so good as last reported, worth from 2 to 30 per fm. The lode in the 20 end west holds as good as last reported, producing about 1 ton per fm.; the two winzes under the 30, and backs over this level, continue without much alteration. We are not yet satisfied about having the stream of water from the adjoining estate, and are, therefore, unable to draw up our stuff by decrease of our own surface water. The mason work for crushers is in progress, and are said to be in train for our next return vessel.—J. BUZZO.

LANIVET CONSOLS.—In the 80 fm. level west, the lode or leader part is 15 in. wide, producing some saving work. In the winze coming down from the 70 on this level, the lode is 1 ft. wide, producing but a small quantity of ore. In the 70 fm. level east, on the north part of the lode, the leader part is 1 ft. wide—saving work.—H. WILLIAMS; July 24.

LEWIS.—The lode in the 60 east is small, and unproductive at present; the lode in the 60 west is 18 in. wide, producing some tin, and very promising. The lode in the 50 east, on south branch, is 18 in. wide, worth 110 per fm. for tin, and very kindly. The lode in the winze, striking below the 40 fm. level, is 3 ft. wide, worth 40 per fm. for tin. The lode in Praed's shaft, sinking below the 8 fm. level, is 2½ ft. wide, worth 30 per fm. for tin. Our tributaries are working with great spirit, and making fair wages at their different tributaries. The greater number of the pitches are very promising.—S. S. NOELL; July 24.

LANCYNFELIN.—Pearson's shaft is sunk 12 fms. 3 ft.; the ground is hard, and troublesome for sinking, and we are very much in want of a whim on it, it being so far to draw the stuff with the tackle. I wish you to say, whether we must erect a new whim on it, or remove some of the old ones in Jones's adit. The ground is favourable for driving, but the air is very bad: we shall be obliged to run a rise through next month, for communication for air, which will be about 6 fms. Our stamps are still going on, and we have a great quantity of stuff more to stamp.—JOHN TREVEKEN; July 17.

LYDFORD CONSOLS.—July 18.—Since my last report, the lode in the south adit end, at Wheel Mary, is much improved; the leader part of the lode is about 15 in. big, and a beautiful-looking lode it is; you may find richer lodes, but it is what I call a leady lode, and its composition is good and fit for any man to look at. I have also to inform you, I have suspended the end going south for the present, and commenced a cross-cut east to cut the other lodes, or parts of lodes, that we have left behind; and I am happy to say, we have discovered a lode or part of the lode; about 3 ft. to the east of the lode we have been driving on; this lode is about 12 or 14 in. big, and a kindlier lode without riches there need not to be found. We have also broke good stones of copper ore and lead in cutting through it, and we have left some for you to break when you come; these two lodes will come together by the appearance of them not far below this level; the lode we have been driving on is going up and down nearly perpendicular—while the lode we cut in the cross-cut underlays more than 2 ft. in a fm., and there is not more than 3 or 4 ft. between them at present in the bottom of the level—so you can judge nearly how far they will go before forming a junction. I think it advisable to continue on the cross-cut east until you come, as I am certain there is another lode not far to the east. I hope you will be able to come in a few days to put her to work, as we are quite ready. You need not be afraid to recommend it in the strongest terms to your friends, for a kindlier thing than this Devon cannot produce.—July 24.—The lode in the south adit end continues much the same as in my last; the east and western parts of the lode, by what I can judge from the appearance of them, seems likely to form a junction shortly, as the horse of capel that is between them appears to be getting smaller—being at present not more than 2 ft. big. I also hope, by the end of another week, to see the horse completely worn out, and both lodes, or parts of lodes, come together, and then I expect to see a favourable change, as in both parts of the lode we have lead and copper, but not rich—some saving work.—J. JENKINS.

MENDIP HILLS.—Our operations in the slag department since my last report have been very satisfactory indeed; we have again resumed removing the top rubbish from the beds of slag, which, I am glad to say, continues to hold forward remarkably well. There are still some hands employed making the carriage-road down the valley, which I hope to see completed by the end of this week. The carpenters are still engaged making and fixing launders as fast as possible. The lode in the 38 fm. level, south of Stainsby's shaft, is now about 5 ft. wide, 2 ft. of which, on the footwall side, is composed of flookan and white spar, with cubes of lead at times, ground favourable for driving; in the winze, sinking below this level, we have but little alteration in the appearance of the lode, it being composed of quartz, limestone, and a little flookan.—F. C. HARKER; July 26.

SILVER VALLEY.—In the 50 fm. level cross-cut, we have now cut through a branch about 14 in. wide, one-half of which is good tin work; we shall at once prepare for, and commence, driving on its course, and about 5 fms. east we expect to find the junction of this and the south branch, where we hope the lode will be more productive—at the same time, we shall prove whether there is another branch further north or not, as all three of the branches in the level above were found together at the junction; the branch now cut through is richer than we anticipated to find it, and is inclining fast towards the south branch going down. At the Silver Mine, in the 30 fm. level west, the lode is 15 in. wide, composed chiefly of flookan and killas, with a small branch on the south side, containing particles of silver. In the 20 fm. level west, the lode is about 10 in. wide, intermixed with munda and quartz; the lode in the slopes, in the back of this level, continues to produce a little saving work, but at present it is not rich. At Oak shaft, we have forked the water, and in clearing, are now down 1 fm. below the 14 fm. level; the rise in the adit, against this shaft, is 2 fms. 1 ft. above the back of the level; and the lode here, although poor, is a little improved in appearance since we commenced rising.—SAMUEL RICHARDS; July 26.

SOUTH DOLCOATH.—I have been underground in this mine to-day, and find that the engine-shaft is now 8½ fms. below the 80 fm. level; the lode in the bottom of the shaft is 3 ft. wide, composed of strong iron gossan, spar, munda, and spots of copper ore—a kindly lode; in one month more the shaft will be complete to the 40 fm. level; but, as that level is not so deep as where ore is found in the neighbourhood, I will recommend you to have the shaft sunk 10 fms. deeper before extending east and west on the lode. At the recommendation of P. N. Johnson, Esq., we have suspended the 20 fm. east and west, and, by coasting, have found the cross-course, which is 8 fms. beyond the 20 fathom level, and west; as the 20 end is so near the said cross-course, and about which all the lodes to the north have been productive, I will recommend that it driven to meet the cross-course, more especially as the lode in the end has a more promising appearance now than ever before; the lode all through the mine has very much the same appearance as other lodes, which have been found productive in depth; I hope this will be equal to other productive lodes by-and-by.—W. PAUL; July 23.

SOUTH TAMAR UNITED.—The men in the engine-shaft are getting on with the fixing of the plunger-lift very satisfactorily, which work will be completed to-morrow. The clearing and securing of the adit level is progressing satisfactorily.—B. ROBINS; July 27.

STRAY PARK AND CAMBORNE VEAN.—In the rise above the back of the 60 fm. level, the lode is 2 ft. wide—worth 200 per fm.; in the 60 end, driving west, the lode is 2 ft. wide—worth 200 per fm.; in the same end, driving east, the lode is small and unproductive. In the 70 end driving west, the lode is 2 ft. wide, worth 150 per fm. In the 80 end, driving west, the lode is 18 in. wide, worth 120 per fm. In the 90 end, driving west, the lode is 3 ft. wide, worth 200 per fm. In the 100 end, driving west, the lode is 3 ft. wide, worth 220 per fm. In the winze, sinking below the 100, the lode is 3 ft. wide, worth 160 per fm. In the 110 end, driving west, the lode is 2 ft. wide, worth 100 per fm. In the 120 end, driving west, the lode is 2 ft. wide, worth

100 per fm. In the 124 end, driving west on Stray Park main lode, the lode is 1 ft. wide, containing stones of good ore. In the 130 end, driving east, the lode is small and unproductive. In the winze, sinking below the 130 fm. level, the lode is 3 ft. wide, worth 100 per fm. In the 150 end, driving east, the lode is 14 in. wide, yielding good stones of ore. In the 150 end, driving west, the lode is 2 ft. wide, worth 100 per fm. In the rise above the back of the 150, the lode is 15 in. wide, worth 100 per fm. In the cross-cut, driving south in the 150, the lode is cut-to-day, but we cannot speak of its size or value until we have driven through it, which will require two or three days to accomplish. In the 180 end, driving east, the lode is 15 in. wide, worth 120 per fm. In the 190 end, driving west, the lode is disordered by the cross-course; and we are driving south expecting to cut the main part of the lode. The tribute ground is looking very well, and our sampling on Wednesday was the largest and best that we have ever had.—RICHARD EUSTICE; ELISHA RALPH; July 26.

SOUTH WHEEL MARIA.—The south cross-cut is now 12 fms. from the shaft; and, in the course of the last week, we have cut the first lode south, underlaying north about 2 ft. in a fathom—it is from 18 in. to 2 ft. big, composed of munda, spar, &c., with some good stones of yellow copper ore. We are still driving south, as there is two other lodes in that direction of a very promising character; and our object for the present is to intersect those with all possible speed; the cross-cut north is driven about 14 fms. from the shaft, and is without any material alteration; the shaft on the north lode, from the surface, is suspended for the present—the water being of great inconvenience in sinking.—G. FRANCIS; July 25.

TAVY CONSOLS.—The lode in the shaft is still large, and looking very promising, but not yet producing much ore. In the 24 fm. level we are carrying the end upwards of 6 ft. wide—north of which is munda, with stones of ore, but have not yet the south wall—altogether, I think it is upwards of 8 ft. wide, and as promising a lode as can be seen. The lode in the 12 fm. level, west of cross-course, still appears to be disordered, but more water than before; the end north, on the lead lode, is producing some saving work—lode about 1 ft. wide; the pitches are much the same. We are taking the ore to quays as fast as possible, and hope to have 50 tons to sample in about a fortnight. The carpenters are getting on brisk with the wheel, and the rest of the surface work is in a progressive state.—A. MARTIN; July 22.

TRELEIGH CONSOLS.—In the 110 fm. level, east of Christo's, the lode is 20 in. wide, more promising, with some ore. In the winze below the 100 east the lode is 20 in. wide, altered but little from last week, worth 60 per fm.; in the 100 cross-cut, north of Garden's, we have driven about 6 ft.—the ground is more favourable, and hope to see the lode next week. In the rise above the 90 west the lode is 2 ft. wide, worth 120 per fm.—ground hard for breaking. In the 80, east of Garden's, the end is suspended for the present, being poor; we are now driving on a south branch, worth 200 per fm.; in the 80, west of ditto, the winze is stopped, and the water very quick; the lode in the end is 2 ft. wide, worth 140 per fm. In the 70, west of ditto, the lode is 8 in. wide, but very little ore. In the 60, west of ditto, the lode is 2½ ft. wide—spar and munda, with stones of ores, not to value. In the 70, west of Symon's, the lode is 4 ft. wide; the south part is ore, worth 50 per fm. In the 60, west of ditto, the lode is 18 in. wide, no mineral; in the adit end, on Wheel Parent lode, the lode is 18 in. wide, producing stones of ore; the lode in this end is very changeable, being shallow.—W. SYMONS; July 24.

UNITED HILLS.—In the 90 fm. level, eastern end, the lode is 2 ft. wide, worth 60 per fm.; in the western end the lode is 4 ft. wide, worth 120 per fm.; in the slopes the lode is 2½ ft. wide, worth 250 per fm. In the 80 fm. level, eastern end, the lode is 3 ft. wide, worth 120 per fm.; west of cross-cut the lode is 2 ft. wide, worth 100 per fm. In the 70 fm. level the lode is 2 ft. wide, worth 60 per fm.; in the eastern shaft the lode is 3½ ft. wide, worth 120 per fm. The 60 fm. has been suspended since August last; the shallow adit was suspended last month. At Wheel Charles, in the 50 fm. level, the lode is 2 ft. wide, not producing any ore. At Wheel Sparrow, in the 40 fm. level, the lode is 15 in. wide, worth 80 per fm. In the 30 fm. level, west of Turner's, the lode is 20 in. wide, unproductive; in driving south we have cut Stacey's lode, which is about 2 ft. wide, worth 120 per fm. In the 20 fm. level the lode is small and poor; in the adit level the lode is 15 in. wide, producing a small quantity of ore. The water at Williams's is still in fork to the 90 fm. level.—T. TREVEKEN; R. WILLIAMS; July 26.

WEST WHEEL JEWEL.—In the 30 fm. level west, on Tolcarne tin lode, the lode is 18 in. wide—worth 70 per fm. In the 12 fm. level, west of Quarry shaft, on the same lode, the lode is 15 in. wide—worth 80 per fm.; in the slopes east of Quarry shaft, in the bottom of this level, the lode is 3 ft. wide, worth 150 per fm.; in the slopes in the back of this level, the lode is 2½ ft. wide—worth 160 per fm. In the slopes in the bottom of the adit, east of Prior's winze, on the same lode, the lode is 2½ ft. wide—worth 180 per fm. In the adit end, west of Quarry shaft, on the same lode, the lode is 18 in. wide—worth 100 per fm. In the 12 fm. level, east of Rowe's winze, on the same lode, the lode is 9 in. wide—worth 40 per fm. We have a little improvement in the adit end, in the last two or three days, on Tolcarne tin lode.—R. JOHNS; T. BRAY; July 26.

WEST WHEEL MARIA.—The eastern engine-shaft is down 38 fms. 4 ft.—the depth where we intend to drive west, and hope to commence by the latter part of this week; the lode in this shaft is about 3½ ft. wide, producing good stones of ore. The western engine-shaft is down below the 54 fm. level 8 fms. 4 ft.; the lode in this shaft is about 3 ft. wide, with spots of ore in places. In the 54 fm. level, east of this shaft, the lode is about 2 ft. wide, composed of capel, spar, and a little ore; in the cross-cut south, in this level, the ground is much the same for driving as last week.—T. RODDA; July 27.

WEST WHEEL ROUGH TOR.—The engine-shaft is down about 6 fms., in which we have the lode composed chiefly of gossan, intermixed with spar. We shall now sink on the course thereof in ground easy of progress.—T. RICHARDS; July 26.

WHEEL ADAMS.—We have at last succeeded in breaking the 50, on the western lode, and are now removing the tributaries' work, broken in April month; when this is finished, the level on the western lode will be cleared and secured, and the rise forthwith resumed. The lode in the 40 south is not so hard as it was last week, but it continues large, wet, and at present unproductive; the slopes in the bottom of this level, on the eastern lode, are suspended, the lode having been taken away to the run; we can now explore the ground from the 50 to better advantage. Every level extended south on the eastern lode having been abandoned, and filled with stuff, I have had no opportunity of seeing the lode in either of them prior to this week, when we have cleared the 40 for several fathoms in length, and have commenced sinking on the lode, to open the ground, and to ventilate the 50, when it shall have reached this point, the air in which is at present bad, in my next report will be described the appearances, prospects, &c. The lode in the 28 fm. level, extending south, is 3 feet wide, consisting mostly of ironstone, with spots of lead; the cross-cut extending west, from the north end in this level, is still in compact blue slate; should this continue for about 6 ft. further, we propose opening a level on the veins already intersected, and then driving a level on the eastern lode, the extreme end of which is not more than 10 fms. from the productive ground said to be gone down in the 18 fm. level. I shall resume my experiments on the gossans, munda, copper, &c., in course of next week. The engineer is engaged in erecting the winding engine, crusher, &c., which work will be executed in a fortnight from this time.—J. PRINCE; July 27.

FOREIGN MINES.

IMPERIAL BRAZILIAN.—Gongo Soco, May 8.—At Bananal, our pumps are at work, and the upper part of the mine—an excavation of about 80 ft. long by 40 ft. wide, and about 50 ft. deep—will be drained before the end of this week. We shall then put our pumps in such repair, as to have the water in this part completely under command; and, by the end of next week, we shall, probably, set the pumps at work on the small shaft, about 8 fms. deep—in the bottom of which, there is a good bunch of gold yet remaining; but I fear we shall do little or nothing on the vein for two or three weeks to come. The erection of houses for our miners has already commenced, and the first of them will be the more readily completed, as we shall use the well-seasoned materials of several old and useless sheds now standing in various parts of the estate.

May 13.—At Bananal, our progress in draining the mine has been slow, owing to the power of the old machinery being insufficient to work the pumps fast enough—a defect we were previously aware of—and to which we are indebted for possession of the mine, which we well know the late proprietors would not have disposed of, if they could have worked it efficiently. We have nearly drained the large pit; and within about 10 days, or a fortnight, it is possible that we may see the bottom of the mine. Nothing can, however, be calculated on with any certainty, as the merest trifle will cause the works to be again flooded; and this precarious state of things is unavoidable, and will continue so until the erection of our new machinery, of which, however, a considerable portion has been already prepared—and we have entire confidence, that when put into working order, the return from the mine will satisfy your expectations. Our houses for the miners are advancing rapidly, and the store and village have been commenced. I regret that Gongo offers nothing new or encouraging.—W. J. HENWOOD.

EAST CARADON MINING COMPANY.

Sir,—Can any of your readers give any information respecting a mine in Cornwall called East Caradon? It stands quoted in your share list at 42½, and the amount paid at the same sum. Are shares negotiable at that price? Where is the mine?—Is it anywhere near South Caradon; and who is the manager?—A CONSTANT READER; Regent-street, July 23.

[This mine immediately joins South Caradon on the east, and is supposed to have been its main lode. The price quoted is merely nominal, no shares having been sold for a long period. The shares are well held—perhaps, no mine better in the county, and the manager is Capt. James Clymo. We gave a report of the last meeting, to which we would refer "A Constant Reader" for further information.]

THE AUSTRALIAN MINING COMPANY.

The annual meeting of shareholders was held at the offices in Adelaide-place, London-bridge, on Monday last, the 26th inst., for receiving the report of the directors, and on other business.

EDWARD HAGEN, Esq., in the chair.

The CHAIRMAN, on taking his seat, said, he was sure the meeting would unite with him in deeply regretting the unfortunate occurrence which had placed him there—the serious, and indeed alarming, illness of their excellent chairman, Mr. Capper.

Mr. HODGKINSON (the secretary) read the advertisement convening the meeting, and then the following report of the directors:—

REPORT.

In presenting their second annual report, the directors have to announce, that on receiving in the month of November official intelligence of the special survey at Reedy Creek having been secured to this company, they proceeded to allot the unappropriated shares, agreeably to the intimation made at the special general meeting, in October last (giving to each shareholder the option of taking a rateable proportion), and that these shares were taken up, and the deposit thereon duly paid.

The committee of management in Adelaide advise, that in consideration of there being several districts bearing the name of Reedy Creek, they have given to the survey the name of the Tungkillo Mines, the mines will henceforward be called the Tungkillo Mines.

The directors have great pleasure in announcing to the shareholders the acquisition to the company, by purchase at public auction, on the 20th October last, of nine sections of mineral land, in the neighbourhood of the Kapunda Mine, which are likely to prove a very valuable addition to the company's property.

The shareholders will have observed that the committee of management, with the small force at their disposal, have commenced operations at seven lodes at the Tungkillo Mines, and two lodes at section 1814. From some of these lodes, stones of good ore were being raised in the months of December and January. At one of the lodes, Wheel Rothchild, in section 1814, four men raised and cleaned 8 tons of excellent ore in a fortnight, the continued working at that lode has, however, been suspended for the present, in accordance with the intention of the committee, as expressed at the time of purchase, for reasons that are perfectly satisfactory to the board.

With reference to the question of a Royalty on the special survey, the directors have to report, that they had an interview on the 17th December last, with Earl Grey, and that they subsequently corresponded with his lordship on the subject; but not concurring with his lordship's views as to the terms of the reference, and expecting to receive by the *Brookline* the original land grant and protest, they proposed to Lord Grey to wait the arrival of those documents before giving a definite answer. That vessel having, however, been unfortunately lost, and no duplicates of the papers having been received, no further steps have been taken. In consequence of the introduction and subsequent withdrawal of the Royalty Bill in the Colonial Legislature, and for other reasons, the directors do not consider it advisable, at present, to press the subject on the notice of the Government.

In addition to the documents above referred to, the specimens of copper ore, sent by the *Brookline* were lost by the wreck of that vessel. The specimens of stone, sent by the *Brookline*, and supposed by the Cornish miners in the colony to be tin, have been carefully analysed, and have not been found to contain that mineral; but the ascertained existence of the component parts of emery, has induced the directors to obtain several opinions as to the real properties and value of that article; the result was such as to induce the directors to order a shipment of 100 tons to be made as an experiment, in the expectation that the quantity thus sent forward would be a valuable substitute for the rare article.

The services of an efficient mining captain, in the person of Mr. Alfred Phillips, have been secured; and the accounts from the colony, testifying the great scarcity of mining labourers, and the consequent high rate of wages demanded, the directors deemed it prudent to engage and send out a supply of mining labour, which they have succeeded in obtaining, under the careful inspection of Mr. Root, the agent, at Redruth, and of Capt. Phillips, at very moderate rates of wages. The whole party proceeded by the *Rajah*, from Plymouth, on the 23rd inst. last. They are expected to reach Adelaide early in September, after the rainy season is over, and their arrival will doubtless enable the committee of management to prosecute vigorously the mining operations of the company.

Finding that the quantity of shipping going to Adelaide would be very inadequate to the demand caused by the increased shipments at the various mines, the directors have taken the precaution of securing as much tonnage for the conveyance home of the company's ores as appeared likely to be immediately required.

The directors have to report the retirement from their number of Sir H. Parker, Bart.; they have not yet thought it necessary to call the shareholders together for the purpose of filling up the vacancy, but they will not hesitate to do so when their duties may require the assistance of another director.

In placing before the shareholders the annual balance-sheet, the directors consider that the funds at present in the colony at the disposal of the committee of management, will be amply sufficient to carry on the operations of the company, until such time as the shipments of ore shall have realised a fund, on which they can, with propriety draw, till the arrival of the *Rajah*, when the increased strength upon the works will no doubt enable them to make shipments from which an early return upon the capital may reasonably be expected. The latest intelligence from the mines, extends over a period of holiday time—viz.: to 23rd January—when little progress could be made; but days had then been sent to bring down ore for shipment by the first vessel, direct to London. The directors hope to be able shortly to advise the shareholders of the receipt of bills of lading, for ore from the various workings.

It was stated at the meeting in October last, that the members of the committee of management, in Adelaide, had requested for themselves the whole of the 2000 shares reserved for allotment in the colony. Mr. J. B. Montefiore also, shortly after his arrival in the colony, elected to take the 500 shares, of which he was, by previous agreement, allowed the preference.

The certificates for those shares have been duly transmitted to Adelaide; the Joint Stock Act does not allow the transfer of shares in the colony; and various representations having been made upon the importance of obtaining a modification of this rule, communications have taken place with the Board of Trade, for the purpose of obtaining the necessary power; there is every reason to expect the attainment of the object, either through the authority of the Board of Trade under the Act, or by the introduction, during the present session, of a clause, empowering that department of the Government to grant, in special cases, the required facility.

The directors have the highest satisfaction in alluding to the establishment, chiefly through the munificence of one individual, of four bishoprics in the Australian Colonies—one Bishop having been appointed for the Adelaide district. Availing themselves of the chairman's acquaintance with the Bishop (Dr. Short), the board entered into communication with his lordship, with the view of providing moral and spiritual instruction to the operatives in the company's employment. For the promotion of that object, a glebe of 50 acres of the company's land, at the special survey, has been granted as a site for a church, clergyman's residence, and a school or schools; and the directors have great pleasure in stating their fullest expectation, that the Tungkillo Mines will be made the permanent residence of a clergyman, and a head missionary station. This point appears to the directors to be one of no small importance, not only as consolidating a settlement in the colony, but as founding a township, which is likely to be productive of much benefit, in the instruction of strangers to establish themselves, and follow agricultural pursuits on the company's property. The directors did not feel at liberty, without consulting the shareholders, to grant any endowment from the company's funds; but they have all promptly forwarded the object, by assisting the subscription in their individual capacity.

Since the last annual meeting, information has been received of the safe arrival of 580 adult emigrants, sent out under virtue of the land grant; many of those persons are miners—and there is every reason to believe, that these parties will prove of great service to the colony. The balance of the number, which the company were entitled to secure, have gone by the *Rajah*. The directors beg to add, that in all the arrangements connected with the emigrants, they have paid every attention, by personal inspection, to the physical comfort, and moral and spiritual condition of the people, whilst on board the vessels. Three directors go out of office by rotation this day, agreeably to the terms of the Deed of Settlement. The lot has fallen upon S. J. Capper, E. Hagen, and J. Masterman, jun., Esqs. These gentlemen being immediately eligible for re-election, offer themselves accordingly.

The CHAIRMAN said, that since the report was printed, a letter had been received from the committee at Adelaide, dated 12th February, 1847.—The letter was read, and was to the effect, that the unfortunate death of Capt. Jury in the *Paringa* Mine, left them without the usual monthly report from the mining captain which was about being rendered, recommending, in consequence of the favourable prospects, increased energy in the workings of the mines.

Mr. HODGKINSON said, that Messrs. Capper and Nephew had received a private letter from Mr. G. A. Anstey, one of the committee at Adelaide, dated the 16th February, 1847—the substance of which was, "the prospects are very excellent, particularly at the new purchase at Allen's Creek, and we ship copper ore."—Mr. HODGKINSON also read an extract from the *South Australian Gazette* of the 13th of February, 1847, stating that "the operations at the mines were carrying forward with great vigour and high promise of success. The ores raised were almost without exception blue and green carbonates, and were rich in produce."

The CHAIRMAN, in reply to some observations by Mr. Taylor, said, that some ore was expected soon, but more might be shipped, and they be not aware of it. (Hear.) As to the absence of information at this office, the directors were anxious to give the proprietors all that they possessed, but they could not give what they were not in possession of. The directors attended regularly, but had no pay for their services. The secretary attended at fixed hours during the day, though he had not a large salary; and in the office they had one young man and two boys, for the sake of economy, as more efficient persons would have been attended with greater expense. With respect to the delay, he would remind them that the possession of the land was not obtained till about a year ago—namely, in June, 1846. Taking, then, the time for the information to arrive, he thought they had not been backward. Two batches of miners had been sent out formerly, but it was only till lately that they had sent out a large number of miners at their own expense, who had not yet arrived. They could not, before they were sure of possessing the lands themselves, engage with a competent superintendent at a high salary. (Hear, hear.) On referring to the report, the hon. proprietor would see that they had anticipated the view of the committee of management, by sending out a mining captain—viz.: Capt. Alfred Phillips—who, with his party of miners, sailed in May last, with instructions to proceed with the workings with all expedition. He trusted this would prove that the directors had done everything in their power to push the concern forward. As regarded the pointing out the locality of the mines, they could not do it previously; for it was only by the last letters that the exact locality was described, which any one could now see on the map before them. The directors had sent over instructions to the committee, to let them have more frequent intelligence, and that no vessel should be allowed to sail for London without bringing some sort of information. (Hear, hear.)

Mr. HODGKINSON said, that the expense of passage of the miners originally sent out was defrayed out of the contract obtained by the company, for the conveyance of 800 adult emigrants, in virtue of the Land Grant, and which contract, as alluded to in the former report, had left a profit, which had tended considerably to cover the current expenses of the company. (Hear, hear.) It was impossible to obtain labourers at the mines, which was the cause of this act of the directors, which had received every previous consideration. He begged to say, that he attended at the office as stated, and was always ready to meet the

convenience of the shareholders at any time; and seeing several large proprietors then present, he would ask if he was not always willing to give any gentleman what information he might require. (Hear, hear.) There were five as a committee in the colony—so that the directors thought instead of appointing a superintendent at a high salary, a mining captain to consult with them would be sufficient for the present; but the question had not been at all lost sight of by the board. (Hear, hear.) The committee were unpaid, but were strictly men of business, and gave every possible attention to the affairs of the company, as might be seen by an inspection of the documents received from them, and this was particularly instanced with respect to the question of a royalty. (Hear, hear.) The directors had no other kind of information at present than that submitted; but had the easterly winds not so prevailed, vessels might have arrived in time for this meeting with the latest information.

In answer to a question by Mr. Halcomb, the CHAIRMAN said the reason why the works at one of the lodes at Wheel Rothchild was stopped, was in consequence of its indication being towards other sections adjoining, and in which the committee wished to obtain for this company without having to pay too large an amount of purchase-money.

Dr. WOOTTON spoke of the valuable qualities of the various ores submitted,—many of which yielded 25 per cent. of iron, 25 of copper, and 50 refuse, per 100. He thought part of the ore was of a more valuable kind than that which came from the Barra Barra, and quite equal to the Kapunda. That was the ore of Reedy Creek. The mineral thought to be tin could be manufactured into the finest emery, which article was now so much in demand,—that its use had multiplied a hundred-fold; in fact, there was no end to the call for emery; and he believed, if they could only get it over, it would fetch 30*l.* a ton, at which rate he would not mind taking it himself. (Hear, hear.)

A PROPRIETOR asked, what became of the 25 cwts. of ore sent over to this country?—Dr. WOOTTON said it was sent to Swansea, and they received the money for it.

The accounts were then read, and laid on the table. A discussion arose as to printing them with the report, but it was negatived.—The report was then on the motion of Mr. BUCKLE, seconded by Mr. ROTHLEY, received unanimously.—The accounts were also received unanimously.

After some observations from Mr. James Horne, Mr. Jacob Montefiore, and Mr. De Castro (directors), Mr. Rothery, Mr. Lindo, and several of the proprietors, Samuel James Capper, Edward Hagen, and John Masterman, jun., Esqs., were re-elected directors.

The CHAIRMAN said, as soon as further information arrived, they would call a special meeting of the proprietors. (Hear, hear.)

The auditors were voted a sum of 30 guineas for their attendance; but which the Secretary said he might undertake to say the auditors would decline receiving until a dividend was paid, or so long as the directors did not receive remuneration for their services. (Hear, hear.)—A vote of thanks was then unanimously passed to the directors, when the meeting adjourned.

UNITED MEXICAN MINING ASSOCIATION.

The usual half-yearly general meeting of the shareholders was held at the offices, Finsbury-circus, on Wednesday last, the 28th inst.

J. HIBBERT, Esq. (in the absence of Sir J. Easthope, Bart.), took the chair.

Before commencing business, the CHAIRMAN said, he had to apologise for the paucity of directors present; Sir John Easthope had proceeded to meet the electors of the borough of Bridgworth, Mr. Shoobred was still remaining at Brighton seriously ill, and the deputy-chairman was abroad; he trusted, therefore, those gentlemen would stand excused.

Mr. MATHER (the secretary) then read the advertisement convening the meeting, the minutes of the last meeting, which were confirmed, and the following directors' report:—

REPORT.

The directors have now to present the result of the company's operations during the past year; and although they do not show so favourable a statement as the previous 12 months, still, considering the deranged state of the country, occasioned by the war, your directors do not view the affairs of the company to be worse than might reasonably have been feared.

Mine of Rayas.—The works of investigation have been carried on, only so far as to equalise the expenses and returns, and no particular feature has as yet been observed.—Great difficulty and outlay have been incurred in keeping the water down to a point, to allow of these workings being prosecuted; but, by the last report, it had been lowered sufficiently to allow the workmen again to proceed; and it is to be hoped, that ore, of good quality, will be found to justify the expectations so long entertained of this mine. The result generally has been as follows:—

Ores raised on mine account, and exported to haciendas.....	26,705 cargas.
Ores raised by hacenes, and sold on joint-account.....	25,797
Total cargoes.....	52,502
And the amount received by the association, on account of Rayas debt, was £11,531 3 0.	
—The amount of the association's coinage for the year	
1845, was.....	£729,821 7 0
1846, was.....	787,681 3 2

Increase in 1846..... £ 27,859 5 2

New Mine.—No favourable opportunity will be lost sight of to secure mines of known worth; but the directors are determined to exercise the most strict inquiry previous to entering into any fresh engagement of this kind; they are not at present in a position to afford any decisive information on the subject.

Haciendas.—These establishments have been occupied in the reduction of the ores on account of the owners of Rayas, with ores bought by the association, and on contract with other parties; but, of late, considerable difficulty has been experienced in keeping them fully occupied, arising from the decreased returns from the Rayas Mine, and the great scarcity of quicksilver—the transit thereof from the coast to the interior having been much interrupted by the war.

Zacatecas.—It will be clear to the proprietors, that from the unsettled state of Mexico, any further steps taken at present to enforce the claims of the Association on the Mexican Government, would be useless. The directors are fully alive to the importance of the claim, and will not delay pressing it, when it is possible to do so with advantage.

The total amount of returns on the general operations of the company for the past year was as follows:—

For Arista indemnity—amount received from the general Government.....	£1,272 2 7
Realised in the reduction of ores at the haciendas of Barrera, Dolores, and Duran.....	19,826 0 3
Realised on bought ores reduced at Dolores and Barrera.....	27,018 1 2
Realised on quicksilver.....	6,779 5 5
Premium on gold coin and profits on stores, &c.....	667 0 2
Balance of bullion and specie shipped to London.....	1,005 4 2
Interest received on sundry accounts.....	3,066 2 4
.....	£59,577 1 1
Amount received on account of Rayas debt.....	11,531 3 0
.....	£71,108 4 1

Less expenses of management, agencies, law charges, postages, &c.....

.....	£29,859 6 3
.....	£41,248 5 6

Or, sterling, at 4*l.* per dollar, is equal to..... £ 7,444 3 11

The total amount of property supposed to be good, belonging to the company in Mexico, as estimated on the 31st December last, was—

Buildings.....	£54,685 0 7
Stores.....	136,150 4 5—£190,835 5 4
Cash advanced to owners of Rayas, on account of profits of the mine, on hacienda contracts, and for account of current expenditure.....	128,287 0 2
Treasury bonds for Arista indemnity.....	6,515 3 0
Claims on the Mexican Government, arising from San Acacia law suit, calculated to 31st March, 1846.....	289,100 0 0
Debt of Rayas Mine.....	677,059 1 3
Bought ores for the haciendas.....	27,085 7 2
Available asset in the hands of the manager at Guanajuato.....	17,572 3 2
.....	£1,336,825 4 5

Or, sterling, at 4*l.* per dollar, is equal to..... £ 335,514 13 2

Management in London.—Robert Biddulph and Thomas M. Flockton, Esqs., are the two directors, and Mr. Bunster, Esq., is the auditor, who go out of office by rotation; but, being eligible thereto, are severally candidates for re-election.

Finances in London.—The following is the account of receipts and payments from the 31st December last (when the accounts were audited) to 27th July last:—

London Account of Receipts and Payments, from 1st January to 27th July, 1847.	
Balance, as per audited account, to 31st December, 1846.....	£29,325 6 8
Received since, by remittances from Mexico.....	10,142 19 8
Transfer fees and discount on stamps.....	5 1 6
Interest on money lent, and Exchange Bills.....	253 17 6
Total.....	£49,727 5 6
Paid to sundry persons, being creditors, on 31st Dec. 1846.....	£191 2 4
For 150 bottles quicksilver shipped to Mexico, and sundry payments on account of the management.....	2652 5 10
For London expenses.....	816 0 1
For a piece of plate, presented to Mr. Shoobred.....	262 10 0
Red scrip.....	56 5 0
First dividend.....	276 0 0
Second ditto.....	197 5 0—£4,461 8 5
Total assets.....	£45,265 17 3
But subject to the unclaimed auxiliary capital.....	£1192 0 0
Red scrip.....	1832 15 0
First dividend.....	1577 5 0
Second dividend.....	1834 0 0
Reserved fund.....	5000 0 0—£10,546 0 0
Leaving an available asset of.....	£ 4,719 17 3

The CHAIRMAN then said, that if any gentleman wished to ask any questions, he should be most happy to give every information in his power.—Some few questions were asked, to which satisfactory replies were given, and the report was unanimously adopted. Robert Biddulph and Thomas Flockton, Esqs., who went out of office by rotation, were severally re-elected directors, and Mr. Bunster was re-elected auditor.

The CHAIRMAN observed, that quicksilver had been so scarce, and so great had been the demand, that they had been obliged to ship 150 bottles on the 1st of this month; they had not been able to ship any from this country since 1st Dec. last; and for some quantities purchased in Mexico, they had been obliged to

pay \$195 per quintal.—In answer to a question from a proprietor, as to any probability of a reduction in the price of quicksilver, from the circumstance of the Almaden Mines having come into the hands of other proprietors, Mr. MATHER observed, that they certainly had no definitive prospects of such reduction.—A GENTLEMAN present said, that it was not likely the present holders of the mines could even now compete with Rothchild, who had by him as much as would supply the consumption of the world for two years.—Thanks were then awarded to the chairman and directors, and the meeting separated.

CONSOLIDATED COPPER MINES OF COBRE ASSOCIATION.

At a half-yearly general meeting of the proprietors of the association, held at the offices of the company, No. 26, Austinfriars, on Monday, July 26,

RUSSELL ELLICE, Esq. (Chairman), in the chair,

The advertisement convening the meeting having been read, the following report was read:—

REPORT.

This is the season and time of meeting, at which it becomes the duty of the directors to lay before the proprietors an audited account of the produce of the mines for the preceding year—accordingly, they now submit to you the annual account for the year 1846; that account falls far, indeed, short of the accounts they have hitherto had the pleasure to lay before you, exhibiting a profit on the year of only 506*l.* 1*l.* 11*d.* The causes of this reduced income and lessened produce were so clearly stated in their last report in January, that the directors cannot better explain them, than by quoting a short extract from that report:—"There was a crash at the San Jose Mine, immediately adjoining the company's White Mine, in September last, which occasioned an interruption to the workings of that mine; and a new engine, of larger power than any hitherto set up at the mines, being in course of erection, has not only taken off many hands from extracting ore, but has actually, for the time, suspended the working of some of the lodes. These causes have occasioned a reduction in the general produce of the mines for the first 11 months of 1846, as compared with the same months of 1845, of 1851 tons—the produce of 1845 having been 15,002 tons, and for 1846 only 14,451 tons. The directors regret also to add, that the market price of the ore has fallen off considerably." The directors are sorry to say, that this statement is completely borne out by the account now laid before you, which shows the whole produce of the year to have been only 15,291 tons against 17,468 tons in 1845. The proceeds also of last year's produce are less by 611*l.* 1*l.* 19*s.* than they would have been, if the market price of 1846 had been equal to that of the preceding year 1845. Having adverted to the state of last year's account, and the causes of its unproductiveness, the directors are happy to say, that the present position and prospects of the company are greatly improved; the erection of the new engine has completed; a valuable lode in the Maria Louisa Mine has been discovered—so that the produce of the old mine will now be materially increased, and in conformity with the expectation held out in the last report in January, the directors have now the pleasure to inform the shareholders, that the Superior Tribunal at the Havana confirmed the decision of the court at St. Jago in favour of the company's title to the church ground, and ordered the company to be put into possession of it, which was accordingly done, and a cargo of its produce has already arrived. This being the decision of a Superior Tribunal, in confirmation of the sentence of the first court, which had decided in favour of this company, is final as to the question at issue; and, though an appeal lies to Madrid, it is not an appeal on the merits, but solely what is called, in Spanish law, an appeal for notorious injustice—that is, the parties would have to show that the judges had acted corruptly, to entitle them to a reversal of the sentence. As anything of that kind is totally out of the question—no lawyers in Europe being more entitled to respect for their learning and integrity than the judges in the superior Spanish tribunals—our opponents are only throwing away their shareholders' money, by attempting to get the Spanish Government to interfere with the regular administration of justice; in fact, nothing but the most flagrant injustice could have deprived this company of the ground, for the Cobre Company alone fulfilled all the conditions required by the mining laws of Spain to entitle a party to it as mining ground. The state of the old mines being improved, and the company being in possession of the Church ground, the agents confidently expected, ere this, to have raised the produce to 2000 tons per month, but, unhappily, a sickness broke out among the native labourers, which affected many of them, and some fatally—so that the number of them have withdrawn from the mines. The agents write by the last steamer, that the sickness had disappeared, but that the labourers had not returned to the mines—in consequence of which, they were raising 500 tons less per month than they otherwise would do. The directors trust that this state of things will be only temporary, and that this may be the last time for some years to come, that they will meet the shareholders without having the pleasure of declaring a dividend. It is with much concern, that the directors inform the proprietors, that in January last the Señor Don Joaquin de Arrieta departed this world. In him the company lost a man of great talents, habits, and was especially useful to the company in negotiating with his countrymen in matters of business connected with the mines. The directors have the satisfaction of stating, that the company's agents, Capt. William and James Reynolds, continue to exert themselves for the interest of the company, and especially to reduce the expenditure; and that the other sub-captains and miners generally continue attentive and diligent in the discharge of their duties.

It was then moved, seconded, and carried unanimously.—That the report now read be received and adopted.—That the thanks of the proprietors be given to Capt. William and James Reynolds, for their continued diligence in directing the company's affairs at St. Jago, and particularly for their efforts to reduce the expenditure; and that this meeting also desires to express its sense of the steadiness and good conduct of the sub-captains and miners generally in their respective occupations.

COPIAPO MINING COMPANY.

The half-yearly meeting of shareholders in this company was held at the offices, Austinfriars, on Thursday last, the 29th inst.

C. H. ELLIS, Esq., in the chair.

The advertisement calling the meeting having been read, G. L. Hollingsworth and Thomas Masterman, Esqs., were re-elected directors, and John Labouchere, Esq., was elected a director, in the place of Mr. Harman.

The CHAIRMAN then read the following report:—

Since the beginning of the year, four vessels have arrived for this company, bringing together 1600 tons of copper ore. Of these, 810 tons averaged 27*l.* per cent. of copper, and sold for 22*l.* 10*s.* per ton; 160 tons from the Marado Mines, averaged 24 per cent., and realised 19*l.* 15*s.* per ton. The remainder will be sold in the course of next month. The net profit on these four cargoes, may be estimated at about 2900*l.* The import duty paid on them amounts to full 2700*l.* The *Abascoy* Mine, with 480 tons of copper ore, sailed from Copiapo, on the 26th April last, and may be shortly expected. The directors have engaged two other vessels to follow the above, which will load about 550 tons. At the date of the last advice (29th April), the company had 1770 tons of copper ore lying in the Valley of Copiapo, in progress of carriage to the port; besides, about 350 tons of clean ore, dressed from the halvans at Malpaso. The company's sent home have averaged 30 per cent. of copper.

Copper Mines.—Copies of the mining captains' reports, from the copper mines of San Pedro and Choco, have been laid in the office, for the inspection of the shareholders. The general prospects at both these mines continue favourable. The directors are of opinion that the ores are reported to be of a superior quality, and the general aspect of the mines encouraging. The shipments at this mine since January last, have averaged 56 tons of ore a month, and those at Choco 45 tons. The number of men employed at these mines has been 60, including 9 English miners.

Pampa Larga Silver Mine.—In pursuance of the resolutions passed at the meeting of shareholders in July last, the operations at the silver mine of Pampa Larga have been continued, with an increased force, during the past year. About 160 tons of silver ore have been raised at this mine up to 31st March last, and one third share of which belongs to the company. Their estimated proportion of expenditure during the above period, has amounted to about 1600*l.*, making the average cost of the ores at the mine about 30*l.* a ton. Four tons of silver ore, as samples, have been received, per the *Michael Williams*, from Pampa Larga, but have not yet been sold. Although one of these would realise about 180*l.* per ton, and another about 20*l.*, the remainder are of such inferior quality, that they would not pay the expenses of bringing them to England. In the latter part of last year the manager represented, that as it was not possible to send the ores by sea, he would send them home to England, and small parcels were accordingly shipped as above stated. Subsequently, however, the manager was of opinion, that it would be more beneficial to smelt the ores on the spot, and recommended works to be erected for that purpose, and a party of competent smelters to be sent out from this country. As this, however, would occasion a considerable outlay of funds, the directors could not entertain the proposition.

Captain Waters's engagement with the company expired last month; and, as it was his intention to return home via Panama, he may be expected to arrive in England early in September next. Assistant Captains Richards and Anner, who have had the superintendence of the copper mines for some time past, will be left in charge of them until another chief mining captain is appointed.

The cash statement and balance-sheet of the company's affairs, so far as they have been furnished by the manager at Copiapo, made up to 30th June last, and verified by the auditors, will be in the office for inspection of the shareholders. The directors lost not yet in possession of the particulars of the outlay at Pampa Larga. The directors lost no time in pursuance of the resolutions passed at the special general meeting, on the 23d of July last year, in writing to gentlemen at Valparaiso, eminently qualified, requesting them to undertake the inspection of the mines and estates of the company, and to report fully thereon. In the month of February last an answer was received, expressing their assent, and, indeed, zeal, in the service of the company. Circumstances, however, occurred, which prevented their proceeding from Valparaiso to Copiapo, so soon as was first proposed. The directors, however, received advice by the last packet, which encouraged them to expect the report of this special commission in the course of next month. The directors, under these circumstances, are inclined to postpone their final recommendation to the shareholders, on essential points connected with the future management of their affairs, until they have the advantage of this report, made on the spot, in aid of their present information and experience. They would, therefore, submit, that it would appear advisable to adjourn the present meeting, giving, of course, due notice of the precise day proposed to the shareholders.

It was moved, seconded, and carried unanimously, that the report be received and adopted, and entered upon the minutes.

WEST WHEAL VICTORIA CONSOLS.—At a meeting of adventurers, held at Oliver's Hotel, Bodmin, on Thursday, the 22d inst.—SAMUEL TOWERS, Esq. (of Manchester), in the chair.—The CHAIRMAN and other gentlemen having inspected the mine, found the appearance of the different lodes of a very satisfactory nature; the adits driven and shafts sunk were done in a workmanlike manner, and the lodes cut both in the adit and shaft have a very flattering appearance, and well deserve a vigorous prosecution. They also examined the large copper lode at the surface, and found it interspersed with copper ore throughout;—it was proposed by Capt. BICKNAP, and seconded by Mr. J. MARSHALL, "to drive the deep adit, to cut this lode, with all possible speed; immediately had to secure the shaft and adit, and also to erect a whim, &c." to set to find the distance from lode to lode; and that two loads of timber be sent to find the distance from lode to lode; and that a call of 5*s.* per share be made, payable before the 5th August.—Capt. Bennett's report represented that in clearing up Brokenhear shaft, and driving a short distance, he had, in the last few days, cut a large and very kindly-looking lode.

about four miles from Tavistock, and is two miles in length, from east to west, and one mile in breadth, from north to south; is bounded on the south-east by the river Walkham, and on the west by the river Tavy, from each of these rivers a large supply of water can be obtained for pumping water, and pulverising the ore. On the western extremity of the sett a copper lode has been discovered, supposed to be one of the William and Mary lodes, which evidently runs through this sett; the lode is small, but copper of a very rich quality has been broken on it, and we may reasonably expect that the main lode is not many fathoms to the north. On the south-eastern part a tin lode is opened upon, and some excellent tinstuff of a rich quality has been broken; an adit level is now being cleared out, which will take this lode about 50 fms. deep; this level is reported to be driven 80 fathoms north, and is cleared upwards of 50 fms.—is driven on a north and south lode, 4 ft. wide on an average, composed of flookan, spar, and spots of lead; to cut the tin lode, I expect, after the level is cleared, will take from 20 to 25 fms. to drive, in ground at from 50s. to 60s. per fm.; and, from the appearance of the lode at the surface, and the well-known fact, that it has been of a most productive character in mines to the east, worked by ancient and modern miners, no doubt remains on my mind; but, when this is effected, a very productive lode will be shown, with many years' work, above the level of the river. Looking at the locality, and the many favourable mineral indications contained in this piece of ground, I do give it as my candid opinion, that a more productive piece of ground is not in the county, and that a small outlay will develop its worth. The Wheal Fodlice Mine, to the east of this sett, has been worked till within the last 14 or 15 years, longer than the memory of man, and evidently produced a considerable quantity of tin, the ground being stopped off clean, and all stamped. The celebrated Virtuous Lady and Wheal Bedford lodes also pass through West Downs.—STEPHEN PAULL: *East Crowndale Mine, July 27.*

CARMARTHEN CONSOLS.—A meeting of adventurers in this mine was held at the offices of the company, Nicholas-lane, on Thursday, the 29th inst.—Mr. J. LANE was called to the chair.—The accounts were examined and approved, and various resolutions, respecting the future proceedings of the company, were entered into.—The report of Mr. T. Williams, the manager, was received with much satisfaction; and all the shareholders present expressed great pleasure at the encouraging prospects of the mine. It was agreed, that the few unappropriated shares should be offered to the public at 5s. per share.—The following is the report of Capt. T. Williams, read to the meeting:—"We have driven the deep adit, at Glantowy, 8 fms. in the diluvial deposit, not having yet reached the upper stratum of rock; the ground is, consequently, very easy, but rather expensive for timber. We have also commenced clearing the old shallow adit, commonly called the water level, and hope to get the whole of the mine clear in about two months."

CONSOLIDATED.—The usual two-monthly meeting of adventurers was held at the mine, on the 21st inst., when the accounts for May and June were examined and allowed as follows, and a dividend of 10s. per share declared.—By balance from last account, 2105s. 16s.; ores sold (less dues), 9909s. 7s. 1d.—12,015s. 3s. 5d.—To costs and merchants' bills, 8799s. 12s.; dividend of 10s. per share, 1000s.—9799s. 12s.: leaving balance in hand, 2215s. 11s. 1d.

TRESEVALE.—At a meeting of the adventurers, held at the account-house, on Tuesday last, the accounts for May and June were passed, as follows:—By balance at end of April, 874s. 7s. 11d.; ores sold (less dues), 8516s. 0s. 10d.; sundry credits, 154s. 6s. 9d.—4544s. 13s. 6d.—To costs and merchants' bills, 3403s. 9s.: leaving balance in favour of adventurers, 1141s. 6s. 6d.

TRETHELLAN.—A meeting of adventurers took place on Tuesday last, when the following abstract of accounts was submitted, and a dividend of 5s. per share declared:—By balance at last account, 558s. 9s. 8d.; ores sold (less dues), 665s. 14s.; West Trethellan adventurers for materials, 189s. 19s. 9d.—1414s. 3s. 5d.—To costs and merchants' bills for May and June, 481s. 19s. 11d.; dividend of 5s. per share, 600s.—1081s. 19s. 11d.: balance, 332s. 3s. 6d.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

MARK VALLEY has a splendid lode in two levels, and it is to be hoped the ore will soon be richer.

POLGOOTH CONSOLS MINE.—This mine is situated in the parish of St. Minver, about two miles from Padstow Harbour, where there is every facility for getting materials of every description for the mine at a very great advantage. The extent of the sett is, I think, about three-quarters of a mile square; there are several lodes in the sett, only one wrought on to any extent—that one runs to the north and south boundary of the sett, about half a mile through a beautiful valley; they have taken up an adit each side of the vale. In the south adit there has been a quantity of lead returned from a lode, varying in size from 3 to 5 ft. wide—this being done by a former party. The present party have been working this mine about seven months, during which time they have risen several tons of lead ore; there are at this time men working on tribute at about 7s. in the 12; in the bottom of adit level the leader part of the lode is 1 ft. wide, solid lead. There is a new shaft in the course of sinking, where they will intersect the lode 12 fms. under adit; according to the appearance of the lode in the adit level I fully anticipate they will meet with a good lode at that depth; in driving the adit north of the vale the lode is 6 ft. wide, with stones of lead from 5 lbs. to 4½ cwt., imbedded with gossan, sugary spar, and flookan; according to the appearance of the lode all through the mine, it leaves not a doubt on my mind but that it will realise the sanguine expectations of the fortunate adventurers. They have commenced the dressing department, in order to get some lead for the market as soon as possible.

SOUTH CARADON is looking as well as ever. The south lode (Clymo) is a magnificent one; but the main lode is not rich.

TRELAWNEY, WHEAL MARY ANN, TREHANE, and HERODSFOOT are all favourites at present, for a very good reason—viz., they are all looking well.

WEST CARADON is much improved: some of the north lodes have been cut rich at deeper levels, and the ends are generally looking better than they did two months since. Other improvements are also expected, and the ore will be taken up much more conveniently when the north shaft is finished.

WHEAL HENRY (Gwenap).—I have much pleasure in advising you of an improvement here in the 40 fm. level, which is worth from 40s. to 50s. per fathom for tin.

The lode at GWINEAR CONSOLS continues equally productive; and the sampling for the next two months is expected to exceed 250 tons.

THE BRAZIL MAIL.—We learn, from Falmouth, that the *Express* arrived off that port, on Thursday night, but her despatches could not be procured.

SAFETY MACHINE FOR MINE SHAFTS.—Among the numerous accidents which happen in mines and collieries, not a few are caused by the breakage of the rope, or chain, by which the various materials and produce are raised and lowered. We have had an opportunity of inspecting a model of a machine, which the inventor has just patented; by the use of which, in the event of the rope breaking, that moment the body attached to it becomes firmly fixed in the shaft; and the greater the weight, the less likely is it to descend—while the engine being again set to work, it is immediately released, and raised or lowered, as before. We shall give a description, in next week's Number, with a diagram; it is most simple and economical.

The new engine erected at Heigston Down Consols, by Mr. William West, started on Monday last, in the presence of a large company. The engine is intended to drain two shafts, and stamp the tin stuff. She worked beautifully. A cold collation was provided and partaken of, after which several appropriate toasts were proposed and drank, with the enthusiasm usual on such occasions. The two engine shafts were at the same time christened; one was named Hitchens's shaft, the other Bailey's shaft.

CAUTION TO PADDLERS.—At the Public Office, Wednesday, on Tuesday, before the Rev. J. Clarkson and James Bagnall, Esq., a paddler, named Elijah Green, in the employment of Mr. John Barker, ironfounder, of Tipton, was charged with having introduced a quantity of bar-iron into what is termed a "donkey" of pig-iron, while it was in one of the furnaces, whereby a loss of about 10s. might have been sustained by his employer. Green was only summoned with the intention of being punished summarily, by fine or otherwise, but as it came out that the bar-iron used was the property of Mr. Barker, the magistrates considered the offence of a felonious character, and committed the prisoner for trial at the sessions.—*Wolverhampton Chronicle.*

A MODERN MIRACLE.—A rope, nearly three miles long, now lies on the verge of the borough of Gateshead, which was the other day a stone in the bowels of the earth! Smelted, the stone yielded iron. The iron was converted into wire. The wire was brought to the wire-ropes manufactory of R. S. Newall and Co., at the Tynes, near Gateshead, and there twisted into a line 4660 yards long. It weighs 20 tons 5 cwt., and will cost the purchasers upwards of 1194s. It is intended for the incline on the Edinburgh and Glasgow Railway, near the latter city. A rope of hemp, of equal strength, would weigh 33½ tons, and cost about 300s. more. It would also entail greater expense while in operation (owing to its greater weight), and sooner wear out.—*Gateshead Observer.*

FORTH IRON-WORKS.—We observe workmen have commenced to fit up a new blast-engine at these extensive works. The engine is to be of the same construction and power as the one at present in operation; and, when completed, the two engines (350 horse-power) will blow the five furnaces already built, together with the three new ones, which are expected to be in readiness by the time the railway opens, which will be in about 12 months hence. We may mention, that the wages at present paid at these works are about 1000s. per week, which will be nearly doubled when the whole of the furnaces are at work. It is obvious of how great importance those works are to our town, causing so large a circulation of money in this neighbourhood, when, previous to their establishment, trade was so dull.—*Stirling Observer.*

A grand dinner has been given at Cheltenham, to celebrate the passing of the Cheltenham and Oxford Railway bill.

SOUTH AMERICAN COPPER.

[We extract from the proceedings of the Geological Society of Dublin, just issued, the following "Analyses of Auriferous and Argentiferous Coppers from South America," by ROBERT MALLEY, Esq., Ph. D. M.R.I.A., &c., President of the Society.]

I beg to present to the Geological Society two specimens of South American copper, containing the precious metals in large proportion. The specimens presented are parts of a cargo of copper, samples of which I was requested to analyze for an eminent mercantile house in England; I am, therefore, enabled to deposit also with the society an accurate account of the constitution of these alloys of copper, which are not devoid of interest. Many members are probably aware that there exists in South America many ores of copper possessing an extremely complex or mixed chemical constitution, and containing, in addition to several of the baser metals, a larger or smaller proportion of gold and silver. Formerly these were always treated at the mine, or near it, by the usual methods of the country for separation of the precious metals; and when the proportion of these fell below a certain standard, so that they would not pay for extraction in this way, the ore was neglected; or, if made into copper, was of small value, as this metal could not be made for all purposes workable on the spot. At a comparatively recent period, however, the mode of proceeding has been wholly changed, through the enterprise of our own metallurgists and refiners, and these coppers, comparatively poor in the precious metals, have now become valuable. The ores are smelted, and partially refined on the spot (with charcoal or wood fuel), from some of the baser or alloying metals, as iron, &c.; and in this state, combined with the precious metals, are shipped for England, where they pass into the hands principally of London refiners, who separate the gold and silver, and dispose of the copper, either in the state of salts of copper, or as metal of the purest and finest quality.

The previously known methods of refining these metals, as well as of obtaining the noble metals from their ores directly, when so rich as to warrant their being treated in these kingdoms, have received a most important addition and improvement, by the processes patented in 1843, by Mr. John Taylor, of London. His method briefly consists in obtaining the silver in solution as chloride or as sulphate; the ore if a compound, sulphuret; or the metals, if in the reguline state, mixed with some sulphuret, such as iron, or copper pyrites, are calcined until the sulphurets are converted into sulphates, and thence by continuing the operation into oxides, say of copper, iron, and silver, the gold if present remaining as metal. At this stage common salt is thrown into the furnace, and raked up with the oxidized metals, at a white heat. Chloride of silver is instantly formed, and the mass, when raked out and cool, is treated with a saturated solution of common salt, which dissolves out the chloride of silver, and which is then precipitated in the metallic state by metallic copper. The gold may be separated by washing and solution, by any of the known methods. By a variation of the process, Mr. Taylor stops the calcination at the point when all the sulphurets have been converted into sulphates. The silver is now in the state of a soluble sulphate, and may be washed out with hot water, and precipitated by any known method.

This beautiful process removes the great previous difficulty in the treatment of these alloys or ores—viz.: the necessity of dissolving the whole mass in menstrua, to obtain the precious metals; and seems likely to be to the refining of argentiferous coppers, what Patterson's process is to the extraction of silver from lead. As the methods of analysis pursued by me were those usually adopted, it does not seem necessary to detail their steps. As, however, extreme accuracy, in determining the amount of the precious metals, was here indispensable, to fix the market value of so large a mass of valuable material, the following results are had from the mean of three analyses each, which accounts for the occurrence of four places of decimals, being one beyond the reach of the balance. I may observe here, that of the two methods usually followed for the analysis of insoluble compounds of gold and silver, neither gives absolutely correct results. If the mass be dissolved in nitric acid, the gold alone remains as neutral; but although this be so finely divided as to have scarcely any metallic lustre, its particles still involve and screen from solution a trace of silver. If, on the contrary, the mass be dissolved in Aqua Regia, the silver remains as chloride, but involving a sensible quantity of gold, whatever be the care with which the solution is made.

As the gold is the more precious metal, and present in the smaller proportion, I have always preferred the former mode of proceeding; and by boiling the metallic gold for a few seconds in caustic ammonia, and testing for silver, almost complete accuracy may be ensured. The following are the constitutions of the specimens of copper now presented:—

SQUARE INGOT, No. 1.—Copper, 97.9120; silver, 1.9730; gold, 0.0527; tin, lead, iron, sulphur, traces = 99.9377.

ROUND INGOT, No. 2.—Copper, 96.3960; silver, 3.4170; gold, 0.0583; lead, 0.0660; tin, iron, sulphur, traces = 99.9323.

The latter gives a doubtful trace either of antimony or bismuth; none of the metals mentioned as "traces," are present in sufficient quantity to admit of being weighed. These valuable alloys, therefore, contain from 19 to 20 ounces of gold, and from 700 to 1200 ounces of silver to the ton of metal, and thus are worth about 400s. per ton.

CALEDONIAN RAILWAY.—We have given, in another column, a report of an extraordinary meeting of the shareholders of this company, principally convened for the purpose of fixing the remuneration to be awarded to the secretary and general manager. J. S. Hope Johnstone (the chairman) announced that the directors had succeeded in securing the services of Capt. Codrington, the Government Inspector of railways, as general manager of their line; and the question then before them was, as to the amount of remuneration—which should be liberal. In this we perfectly agree. The Caledonian Railway is one of the most important lines in the kingdom; and as the position of general manager is, perhaps, the most responsible individual office in a railway establishment, we think the directors have acted most judiciously in their choice. Capt. Codrington is, doubtless, a gentleman of talent and considerable experience in the construction and management of railways; and, as he must give up his present appointment, and all chances of future Government promotion, we think the shareholders have decided wisely, in adopting the liberal terms recommended by the directors. The masonry and works of this line are equal to any in the kingdom; and it is confidently expected, that 40 miles from Carlisle will be opened to the public in five or six weeks.

THE LONDON AND BRIGHTON RAILWAY AGAIN.—There is now every proof that this company is either deficient in proper tact and talent in its management, is unaccountably not possessed of anything like sufficient locomotive power, its directors actuated by a mean and false economising spirit, or a determination to oppose that *cor populi* which has already roared to them in something like thunder. The South Eastern Company have long complained to the Brighton management of the detentions they daily experience in passing the Croydon line, but without any amendment, although, from continual promises, they acknowledge it exists. A firm and well-written letter has been addressed by Mr. J. Walter, the superintendent of the South Eastern Company, to Mr. P. Clarke, the Brighton manager, calling upon him to lay it before the directors. It calls upon them immediately to take steps for altering this state of things; and the writer has published the letter in a morning contemporary. We trust it will bring some of these hitherto pampered, but inefficient, gentry, to their senses; at all events, the public must now be made aware of the extent of their danger, and the saddle be placed on the right horse.

WEST FLANDERS RAILWAYS.—The first portion of this work is now complete, and open for traffic—viz., from Bruges to Courtrai, a distance of about 33 miles. This portion of the undertaking, being about one-third part of the whole, forms an integral work in itself. It connects Bruges with Courtrai in a direct line, and effects a saving of 30 miles in the distance between Ostend and Paris, Lille, and all points on the northern line of France. The remaining portions of this work, are the lines from Courtrai to Ypres and Poperinghe, and from Deynse on the State line, near Ghent, to Furnes, from which point it will ultimately be connected with Dunkirk and Calais. It is not intended, as we learn, to proceed with any further works at present. The company have, under the terms of their grant, until May, 1849, to complete the remainder, and there will be no difficulty in obtaining an extension of the time, if it should be expedient to do so. The company having no half-finished works on hand, can afford to wait for better times before entering on new works, or requiring more calls. The total length of the West Flanders lines, when completed, will be about 86 miles; the amount of population served, 650,000—being 100,000 more than the population of Kent, and 140,000 more than that of Staffordshire.—*Railway Review.*

THAMES ECONOMIC STEAM-BOAT COMPANY.—We have before us a prospectus of the formation of a new steam-boat company to ply on the Thames, and to be established on entirely new principles; low fares are to be the order of the day. The boats will be constructed with every consideration to the convenience and comfort of the passengers, and very different to those on the present crowded and dangerous system; there will be covered cabins on deck, and, in fact, the vessel may be called a steam gondola. It has been received too late for a lengthened notice; but we shall return to the subject next week.

THE ECONOMY AND APPLICABILITY OF GAS FOR DOMESTIC PURPOSES.—The use of coal gas for a variety of domestic purposes has not yet been properly appreciated by the public; nor is it generally known, that it can be applied to cooking in various ways—for frying, stewing, steaming, boiling, heating irons, &c.—and all in a way far more cleanly and economical than by coal fires. According to a statement by Mr. A. Croll (the gas meter manufacturer), 21 cubic ft. of gas, costing 2d., are equal in illuminative power to 1 lb. of composition candles costing 1s., and to 1 lb. of wax candles costing 2s. 6d. As compared with tallow, the cheapest domestic light, the saving would be three-fourths, and small burners may be used at a cost of six-sevenths of a half-penny per hour. Many kinds of gas apparatus are now fitting up in many of the mansions of the nobility and gentry, and it will not be long ere it will be found most economical for families in a moderate station of life.

THAMES TUNNEL COMPANY.

The number of passengers who passed through the Tunnel in the week ending July 24, was 16,329; amount of money, £70 10s. 3d.

ALLOYS.

The following collection of alloys is translated from the *Revue Scientifique et Industrielle*—

SILVER STEEL.
1 part silver.
500 ditto steel.
According to Faraday and Stodart, this alloy would be superior to the best steel. Steel also combines with other metals—such as nickel, platinum, manganese, &c.

ALLOY OF COPPER AND ANTIMONY.
75 parts of copper.
25 ditto antimony.
This alloy is brittle, lamellated, of a violet colour, susceptible of a fine polish, and is more fusible than copper.

ALLOY OF ANTIMONY AND TIN.—commonly called pewter, by the English.
100 parts of tin.
8 ditto antimony.
4 ditto copper.
1 ditto bismuth.

ALLOY OF BISMUTH AND LEAD.
1 part of bismuth.
1 ditto lead.—A very tenacious alloy, melting at 165°. Centigrade = to 370 Fahrenheit.

AN ALLOY OF BISMUTH AND LEAD.
2 parts of lead.
1 ditto bismuth—gives an alloy which dilates powerfully, at the time of cooling.—(This property makes it extremely suitable to all castings in which the greatest sharpness and finish are desirable.—H. Maiss.)

ALLOYS FOR MEASURES OF CAPACITY.
82 parts of tin.
18 ditto lead.
A very fusible and brilliant alloy, with which are made what are called the Brilliants of Fahlun.

QUEEN'S METAL. Imitating silver, has great metallic lustre.—
9 parts of tin.
1 ditto lead.
1 ditto antimony.
1 ditto bismuth.

ALLOY OF TIN AND ZINC.
1 part of tin.
1 ditto zinc, is almost as tenacious as brass, and melts at 460 to 500 Centigrade = 900 Fahrenheit.

ALLOY OF TIN AND IRON.
These two metals may be alloyed in all proportions.
35 parts of tin.
65 ditto iron—form an alloy of a clear crystalline grey, and so brittle, that it may be reduced to an impalpable powder.

ALLOY FOR TINKING.
8 parts of tin.
1 ditto iron, gives a greyish white alloy, brittle when hot, of a fine close grain, may be cut with scissors, and is fusible below the red heat. It forms a much more solid tinning than pure tin does.

ALLOY OF GOLD AND IRON.
From 3 to 4 parts of iron and 1 of gold, gives a very hard greyish white metal. These alloys are fusible in all the proportions—more so in proportion to the greater part being gold.

Nitric acid attacks this alloy—notwithstanding it does not attack either of the component metals when separate.

ALLOY OF PLATINUM AND LEAD.
Lead has a very great affinity for platinum, with which it forms brittle alloys—tin and zinc likewise.

ALLOY OF LEAD AND GOLD.
11 parts of gold.
1 ditto lead, forms a pale yellow metal, as brittle as glass, and the fracture resembles that of porcelain. By capellation, the lead separates completely from the gold.

AMALGAM OF BISMUTH.
Mercury readily combines with bismuth.
1 part of bismuth.
4 ditto mercury, form a liquid amalgam, used to cover the insides of glass globes. Another amalgam is also used.

10 parts of mercury.
1 ditto bismuth.
1 ditto tin.
1 ditto lead.

Equal parts of bismuth and mercury, form an amalgam which crystallises.

AMALGAM OF GOLD.
The following amalgam is used to gild metals, and to make what is called *Or Moulu*:—
7 to 9 parts of mercury.
1 ditto ditto gold.

AMALGAM OF PLATINUM.
63 parts of mercury.
37 ditto sponge of platinum, rubbed in an iron mortar, the bottom being warmed, forms an amalgam, at first as soft as butter, and which slowly hardens.
100 parts of mercury.
3 ditto platinum, form an amalgam, soft, pasty, and is used to gild metals.

AMALGAM OF ZINC AND TIN.—Black Amalgam, *Ingenhouse Amalgam.*—This is used in the casheons of electric machines.
3 parts of mercury.
1 ditto zinc.
1 ditto tin.

ANCIENT BRONZE.
Mr. Girardin has analysed some bronze hatchets of the old Gallic Romans. We possess analyses of the alloys of copper out of which the ancients made their arms and tools.—That bronze is thus composed:—
Copper 77.77
Tin 19.61
Zinc 1.18
Lead 1.18
The zinc and lead must have been accidental impurities in the tin and copper.
Another Gaulish axe, or hatchet, was composed of:—
Copper 74.9
Tin 25.1
Vanquelin found that an antique potguard, brought from Egypt by M. Pasmacques, was composed of:—Copper 83
Tin 14
Iron 1

NEW PATENTS.

J. Platt, Oldham, Lancashire, and T. Palmer, of the same place, for certain improvements in machinery or apparatus for making cards, also for preparing and spinning cotton and other fibrous materials, and for preparing and dressing yarn, and weaving the same.

C. De Borge, Arthur-street, West, City, for improvements in building and traction apparatus, and in springs for railway and other carriages.

E. Seal, Aldgate, and H. Bear, for improvements in the manufacture of tobacco.

E. Ryan, Park-place, Baywater, Middlesex, for improvements in consuming the smoke, and economizing the fuel of steam-engines, breweries, and manufactories generally.

J. Morrison, Paisley, shawl manufacturer, for improvements in applying power in propelling or moving carriages, and in giving motion to machinery.

J. Paul, Thorp Abbot's-hall, Norfolk, farmer, for improvements in cutting or forming drains in land, and for raising subsoils to the surface of land.

F. Star, Warwick, for a new jet for the delivery of water and other fluids, which he styles the Protean Jet.

W. Bains, Norwich, for improvements in the manufacture of parts of railways, and in the bearings of machinery, and in apparatus used in constructing railways.

A. V. Newton, Chancery-lane, mechanical draughtsman, for an improved kiln, or oven, for firing porcelain and other similar ware.

W. F. Parker, Lime-street, City, for an improved mode of manufacturing cigars.

G. Withers, New York, America, for improvements in manufacturing or working iron for various useful purposes.

J. Hastie, Greenock, Scotland, engineer, for improvements in the application of steam-power to turn certain kinds of mills or machines with a continuous rotary motion.

S. T. Jones, Stamford-street, Surrey, for improvements in steam-engines, and in machinery for propelling vessels.—*Mechanics Magazine.*

RAILWAY TRAFFIC RETURNS.

From these returns, it will be seen, that the amount of traffic for the last week, on nearly 3154 miles of railway, was 188,974s., thus accounted for:—108,606s. for the conveyance of passengers only, 40,476s. for the carriage of goods, and a remainder of 39,742s. for passengers and goods together, not respectively apportioned; being an increase over the corresponding week of last year of 16,176s., when the mileage was about 2,290.

Name of Railway.	Length in miles.	Present actual cost.	Last Div.	Traffic Returns. 1847.	1846.
Abtbroath and Forth	15	£143,000	3 p.c.	£273 0 0	£285
Chester and Birkenhead	15	555,293	2	754 0 0	718
Dublin and Drogheda	23	680,346	3	971 0 0	818
Dublin and Kingstown	7	475,262	9	1174 4 1	1107
Dundee and Arbroath	164	126,323	6	273 0 0	443
Dundee, Perth, and Aberdeen	47	385,745	—	1036 7 2	—
East Lancashire	304	814,417	—	1087 0 0	—
Eastern Counties	226	6,513,026	7	18676 15 11	9673
Eastern Union	44	531,021	—	1109 0 0	—
Edinburgh and Glasgow	48	2,275,485	6	3867 8 8	4216
Glasgow, Paisley, and Ayr	69	1,567,381	7	3072 0 0	2406
Glasgow, Paisley, & Greenock	22	835,918	2	1549 0 0	1349
Great Western and Western	110	1,342,718	—	1688 0 0	—
Great Western	241	9,714,939	8	21948 0 0	21341
Kendal and Windermere	14	—	—	229 0 0	—
Lancaster and Carlisle	70	975,925	—	1324 0 0	—
London and North Western	374	16,042,004	10	49885 13 5	46700
London and Blackwall	4	1,107,717	1	1417 0 0	1861
London, Brighton, & South Coast	137	5,109,607	—	10483 0 0	8116
London and South-Western	119	4,378,769	9	10877 7 2	8002
Manchester and Leeds	112	5,036,391	5	9174 0 0	7760
Manchester, Sheffield, & Lincolnsh.	49	1,078,108	5	3607 0 0	2150
Maryport and Carlisle	29	—	—	604 0 3	537
Milford Company	306	7,303,374	7	22601 0 0	18563
Newcastle and Berwick	63	1,184,079	0	3405 0 0	—
Newcastle and Carlisle	65	1,184,080	5	3226 0 0	2077
Norfolk	70	1,189,889	7	2631 0 0	2074
North British	72	1,108,558	—	3226 0 0	2133
Shrewsbury and Chester	17	354,945	—	444 0 0	—
South Devon	30	1,061,283	5	1194 0 0	—
South-Eastern	107	5,868,411	8	10400 16 1	10189
Taff Vale	25	808,411	0	1801 0 0	1162
Ulster	85	336,353	6	1614 0 0	713
Whitehaven Junction	15	91,274	—	228 0 0	—
York and Newcastle	124	1,719,317	9	8074 0 0	—
York and North Midland	102	5,483,250	10	8699 0 0	7411

Current Prices of Stocks, Shares, & Metals.

STOCK EXCHANGE, Saturday morning, 11th July 1847.	
Bank Stock, 7 per Cent., 1847	Belgian Bonds, 4 per Cent., 1847
3 per Cent. Reduced Ann., 1847	Dutch, 2 1/2 per Cent., 1847
3 per Cent. Consols Ann., 1847	Brazilian, 5 per Cent., 1847
3 per Cent. Ann., 1847	Chilian, 6 per Cent., 1847
3 per Cent. Ann., 1847	Mexican, 5 per Cent., 1847
Long Annuities, 9 1/2	Spanish, 5 per Cent., 1847
India Stock, 10 1/2 per Cent., 1847	Portuguese, 5 per Cent., 1847
3 per Cent. Consols for Acct., 1847	Russian, 5 per Cent., 1847
Exchequer Bills, 1000l. 3d., 11 1/2 p.	

MINES.—The amount of business transacted in the mining share market has not been so extensive as we had anticipated from the closing of last week, as well as the favourable appearances which presented themselves at the commencement of the present. Several private negotiations are incomplete, and inquirers for favourite mines have rendered themselves scarce during the past few days; these circumstances we can evidently trace to the general excitement and interest consequent on the City election. These matters being now concluded, we hope to see business resuming a steady and satisfactory course.

In Carn Brea shares we learn that a transaction, to a large amount, has been completed, and there are still buyers of these shares. In Stray Parks some business has been done; and the official report, received on the 28th, confirms private advices, which are highly satisfactory; still parties inclined to purchase appear more disposed to await the result of the coming meeting of adventurers. Treleighs have been, and are still, in request; bargains have been effected at an advance. Trelawney, Mary Ann, Herodfoot, Trehan, and Herodcombe shares may find a steady market. North Pool, West Bassett, South Wheel Bassett, East Pool, and Blaenavon, have been inquired for, but we are not aware of business having been done.

A meeting of the shareholders in Wheel Maria Tin Mine was held on the mine, on the 20th inst., when a call of 5s. per share was made, leaving a balance of 720l. due to the pursuer; this announcement was received in London with considerable surprise, as the shareholders here were given to expect a 5s. dividend at the end of August, and which the printed report from the two captains of the mine, dated the 29th December last, fully bore out: we have since been assured, that an unknown amount of tin-stuff has been stolen from the mine, and the suspected parties absconded. We trust the pursuer will give the absent shareholders a more satisfactory account of the increased expenditure, and the large debtor balance on the books, than they at present possess, and establish the fact, that their confidence has not been misplaced.

The foreign share market has been remarkably heavy this week, the only transactions that we are aware of having been done in Asturian and Imperial Brazilian. The North Carolina Company having completed their arrangements, shares, we hear, have been in request at a premium. The South Australian Company held their annual meeting on Monday last, a full report of which will be found in another column.

The United Mexican Company held their annual meeting on Wednesday last; from the directors' report, and the financial statement presented, there is every reason to anticipate a dividend in course of the next half-year. A surplus of 5000l. remains in hand, which would have been considerably increased, but for the advanced price of quicksilver used in refining—the warfare now being carried on in Mexico rendering the transit unsafe. The Asturian Mining Company is represented in a very favourable state, their prospects being of the most gratifying character; it is stated that a report had been received from a mineral surveyor, sent to inspect the mines by a disinterested party, who calculates that more cinnabar would be raised than the Spanish Government purchases in the year—that quantity being limited to a fixed amount, as well as prices, whilst the Government excludes all other buyers; thus monopolising the great quicksilver market. The returns from iron are likely to become very productive.

By letters from the Cape, we are advised that coal has been discovered in the locality of the Kowie River; should this prove correct, it will form a grand adjunct to our commercial interests, and greatly facilitate steam navigation across the Indian, Pacific, and Atlantic Oceans.

RAILWAYS.—There was no material alterations in the prices of shares, or aspect of the market, at the commencement of the week; things remained extremely inactive, and no symptoms of recovery appeared. Throughout the week there has been no new feature, and the market closed yesterday in a dull and heavy state.

MEETINGS.—**KENDAL AND WINDERMERE:** half-yearly; the whole line had been opened in April last, and the traffic had since greatly increased; the number of passengers to end of June was 53,550; cost of line, 147,000l.; **LONDON AND GREENWICH:** half-yearly; the balance in favour of the company was 7251l. 3s. 2d.; a dividend of 3s. 6d. a share was declared.—**TORONTO AND LAKE HURON:** to account accounts; the receipts had been 1094l. 10s.; expenditure, 1690l. 5s.; balance, 304l. 5s.; it was decided not to dissolve the company, but keep its position, and see what steps Government would take.—**IRSWICK AND BURY:** half-yearly; the returns for the six months were 26,744l. 12s. 6d.; the capital account showed a gross expenditure of 665,204l. 9s. 11d.; and a balance in hand of 82,801l. 4s. 4d.; the amalgamation with the Eastern Union had not been completed.—**AMBERGATE, NOTTINGHAM, AND BOSTON:** special meeting of the Yorkshire shareholders; a committee was appointed to co-operate with the London and other shareholders.

LATEST CURRENT PRICES OF METALS.

LONDON, JULY 30, 1847.

IRON—Bar a. Wales...	£ s. d.	COPPER—Ordin. sheets, lb.	£ s. d.
London	0 0 10 0	bottoms	0 0 0 11
Nail rods	0 0 10 0	YELLOW METALS SHEATHING	0 0 0 0 9 1/2
Hoop (Str.)	0 0 11 5 0	TIN—Com. blacksg. cut.	0 0 4 8 0
Sheet	0 0 13 0 0	" bars	0 0 4 9 0
Bars	0 0 11 5 0	Refined	0 0 4 11 0
Welsh cold-blatt	4 10 5 5 0	Straits	4 4 4 5 0
Foundry pig	3 3 3 10 0	Bancas	0 0 4 6 0
Scotch pig	3 3 3 10 0	TIN-PLATES—Ch. IX, 1/2	1 1 1 0 0
Rails, average	0 0 9 0 0	" IX	1 1 1 0 0
Russian, CCND	0 0 0 0 0	Coke, IC	0 0 1 5 0
PSI	0 0 0 0 0	" IX	0 0 1 11 0
Gouffier	0 0 0 0 0	LEAD—Sheet & refined	0 0 19 10 0
Archangel	0 0 13 10 0	Pig, refined	0 0 20 5 0
Swedish, on the spot	1 5 11 10 0	" common	0 0 18 10 0
" Steel, 1/2	0 0 16 5 0	" Spanish, in bd.	0 0 18 0 0
" 1/2	12 10 15 0 0	SPELTEN—(Coke) on spot	20 0 0 0 0
COPPER—Tie	0 0 0 0 0	" for arrival	0 0 20 0 0
Tough cake	0 0 0 0 0	ZINC—(Sheet) in export	0 0 27 0 0
Best selected	0 0 101 0 0	QUICKSILVER	0 0 0 4 6

[From our Correspondent.]

Iron remains without change as to prices, but the demand is not so good as it was about two weeks since; of Swedish iron and steel no recent sales.
TIN.—At the sale in Rotterdam by the Dutch East India Company on 27th inst., the whole 120,000 slabs of Banca were taken in one lot by a Dutch house at 45s. guilders per 50 lb. Netherlands, of which 30,000 slabs were resold in lots of 10,000 each, at 49s. guilders, with an engagement not to sell any more for three months under 51s. guilders; it does not appear that the English smelters are at all interested in this purchase, and some doubt is entertained as to whether the sale of the 120,000 slabs were a *bona fide* one; the prices of Banca and Straits in this market, and of English, remain unaltered.
SELTEN.—No sales of any consequence reported this week. Other metals remain as last week's quotations.

GLASGOW PIG-IRON TRADE, JULY 29.—We have had a very quiet week in pig-iron; at the end of last week prices receded, and mixed Nos. were sold at 69s. cash; the market has since rallied a little, and sales opened at 69s. 6d.; mixed Nos. have been sold this week at 71s. 6d. to 72s., three months, open delivery. We quote the price of mixed Nos. at 69s. 6d. to 70s.—cash, free-on-board—buyers at 69s.

PRICES OF METALS IN AMERICA.

NEW YORK, JULY 14, 1847.

COPPER—Sheathing	8 cts. 5 cts.	IRON—Engl. & American	8 cts. 5 cts.
" Old	0 23 1/2 0 0	" Hoops do.	0 24 0 6
" Braziers	0 23 1/2 0 0	" Hoops do. cut.	0 50 0 60
" Pig	0 23 1/2 0 0	" Nail-cut 4 da. 40	0 44 0 42
" Bolts	0 24 0 0	" (3d l.c. & 3d s.c. more)	
LEAD—Pig	4 12 1/2 0 0	" Wrought, 6 to 20	0 10 0 14
" Bar	0 5 0 0	" Horse-shoe	0 17 0 21
" Sheet	0 5 0 0	" Buck	0 5 0 0
IRON—Pig, Eng. & Scotch	0 0 30 0 0	SPELTEN—In plates	0 34 0 0
" American, No. 1	0 0 32 0 0	" German	0 10 0 13
" common	0 0 25 0 0	" English Hoop L.	0 13 0 13
" Bar, RPS	1 00 0 102 50 0	" Spring	0 5 0 0
" Swedish	87 50 0 0	" Trieste	0 0 0 0
" American, old	85 0 0 0	" American	0 0 0 0
" English refined	85 0 0 0	" Tin-Block, South Amer.	0 0 0 0
" common	73 50 0 0	" Ditto, East India	0 0 0 0
" Sh. Russian, let quat	0 11 1/2 0 12	" In plates, 1/2 dx. box	0 9 0 25
" Duty—Pig and bar, 3	0 0 0 0	" Sheet, 4 cts. per lb.	

EXPORTS OF METALS TO ALL INDIA FROM LONDON AND LIVERPOOL.

FOR THE FIRST SIX MONTHS OF 1846 AND 1847.

Spelter	1846.	1847.	In. in 1847.	Dec. in 1847.
Copper	4141	371	—	3170
Iron, British	5306	4954	337	350
Ditto, foreign	1735	451	1274	—
Tin-plates	3669	4174	305	—
Lead	173	000	428	—
Steel	210	412	173	—
Quick silver	390	—	—	210

PRICES OF MINING SHARES.

BRITISH MINES.				BRITISH MINES—continued.			
Shares.	Company.	Paid.	Price.	Shares.	Company.	Paid.	Price.
1000	Aberystwyth	7	12	2000	South Dulceith	8	3
315	Albert Consols	1	3	256	St. Friendsli. Wh. Ann	16	14
1024	Alfred Consols	24	38	300	South Harvannah	23	26
256	Altarnun Consols	3	19	9000	South Tamar	—	—
225	Andrew and Nangles	25	16	256	South Tolgu	24	18
10000	Ayrshire Iron Company	5	48	800	South Towan	10	11
1024	Baleswidens	9	15	256	South Trelawney	12	10
128	Balnoon Consols	30	25	128	South Yeoland	10	20
10000	Barrow Iron Co.	2	—	128	South Wheel Bassett	110	65-70
1000	Barristown	44	12	124	South Wh. Francis	160	210
4000	Bedford	34	24	256	South Wh. Hope	—	5
128	Besore Lead Mine	14	10	1000	South Wh. Maria	24	24
315	Birch Tor Tin Mine	24	77	256	South Wheel Rose	11	1
160	Blaenavon	50	22	10000	Southern & Western Irish	2	4-5
100	Botalack	175	140	250	Spearne Moor	30	40
120	Brewer	5	7	256	St. Austell Consols	8	14
10000	British Iron, New, regis.	10	15	128	St. Ives Consols	—	320
—	Ditto ditto, scrip.	10	15	128	St. Michael Penkivel	5	10
128	Budnick Consols	52	40	1000	Stray Park	43	29
128	Burth	20	21	9600	Tamar Consols	5	54
100	Bwlch Cwmerin	20	—	1024	Tavy Consols	34	44
128	Callstock	17	20	6000	Tincroft	7	8
1000	Callington	19	25	1000	Tin Vale Consols	2	24
256	Caradon Copper Mine	24	17	128	Ting Tang	—	—
256	Caradon Mines	24	17	128	Tolbunby	143	10
256	Caradon United	24	10	256	Trehane	2	23
256	Caradon Wh. Hooper	20	4	5000	Treleigh Consols	6	42
1000	Carn Brea	15	105	2000	Trenance	2	—
2048	Carmarthen Consols	2	3	256	Trenow Consols	30	15
2048	Cascade	1	1	96	Tresavean	10	250
112	Charlestown	200	100	120	Trethellan	5	27
512	Charlestown	9	14	120	Trevelick and Barrior	20	15
512	Coalville Hill	9	14	256	Trevellock	20	15
1900	Combmartha	7	3	128	Trevelard	12	26
500	Comblawn	13	14	6000	United Hills	5	1
128	Comfort	45	100	100	United Mines	300	350
256	Condurrow	20	30	256	Wellington Mines	15	30
2560	Cook's Kitchen	14	54	128	West Bassett	45	25
1000	Coombe Valley Quarry	14	11	256	West Caradon	20	168
1024	Copple Betton	44	20	128	West Caradon	20	168
1024	Cosken	44	20	512	West Fowey Consols	40	15
240	Cradock Moor	15	15	256	West Fowey Consols	40	15
128	Creeg Braws	120	100	256	West Gwamler	7	8
500	Cubert Mine	124	23	—	West Kekewich Consols	—	3
2048	Dartmoor Consols	2	4	256	West Providence	1	18
7100	Derwent	8	5	200	West Seton	40	70
1024	Devon & Courtenay Con.	6	34	—	West of Scotland Iron Co.	210	212
1024	Devon & Courtenay Con.	6	34	128	West Trelhelian	5	35
180	Dolcoath	30	50	256	West United Hills	5	12
2560	Drake Walls	4	4	256	West Wh. Friendship	7	3
10000	Durham County Coal	45	9	3845	West Wheel Jewell	11	12
256	East Avenney	6	10	2560	West Wh. Maria	11	12
112	East Caradon	42	42	2560	West Wheel Rough Tor	4	2
2048	East Crowndale	42	12	256	West Wheel Shepherd	5	24
512	East Combe Silver Lead	5	64	256	West Wheel Tolgu	21	2
128	East Pool	5	20	256	West Wheel Treasury	19	18
100	East Relistian	22	40	5000	Wicklow Copper	5	12
9000	East Tamar Consols	13	2	184	Wheel Adams	41	10
—	East Wheel Albert	1	3	1000	Wheel Agar	—	8
94	East Wheel Croft	280	310	256	Wheel Albert	10	8
256	East Wheel Fortune	2	3	128	Wheel Acland	13	2
128	East Wheel Rose	50	1300	256	Wheel Allen	2	5
2048	East Wh. Rough Tor	2	2	237	Wheel Anderton	164	26
—	East of Scotland Iron Co.	34	14	128	Wheel Ann	—	504
183	East Wheel Seton	14	20	128	Wheel Arvon	3	4
256	Elborough	1	24	1024	Wheel Ash	3	12
256	Exmoor Wh. Eliza	34	11	120	Wheel Bal	—	20
512	Fowey Consols	40	45	2560	Wheel Barbara	1	3
6400	Gadair	2	2	256	Wheel Benny	6	5
5000	Galvanised Iron Co.	10	94	256	Wheel Blencowe	8	10
10000	Glenfing Co. for Iron	2	11	256	Wheel Buckets	20	22
2048	Georgia Tin Mines	14	18	256	Wheel Bunt Consols	4	4
256	Gouanema	31	70	256	Wheel Cuck	18	12
128	Goovrea	4	14	128	Wheel Clifford	150	190
244	Grambler & St. Aubyn	12	12	128	Wheel Courtenay	—	20
100	Great Consols	1000	400	6000	Wheel Curtis	12	13
256	Great Callstock Moors	22	25	256	Wheel Dyke	12	13
2560	Great Callstock Moors	22	25	256	Wheel Fortescue	54	8
256	Great Callstock Moors	22	25	512	Wheel Fortune Consols	3	64
512	Great Callstock Moors	22	25	388	Wheel Frederick	2	2
1500	Great South Tolgu	2	2	1024	Wheel Grace	27	40
100	Grogvian	5	—	128	Wheel Grace	3	24
1000	Gunnis Lake	1	3	128	Wheel Harriet	45	50
256	Gwnear Consols	5	25	256	Wheel Jane	16	20
1000	Hanson	14	2	256	Wheel Kekewich	4	4
1000	Harrowbarrow Old Mine	8	2	256	Wheel Louisa	74	12
800	Hawknor	1	16	112	Wheel Margaret	79	250
6000	Helgarrow Down Cons.	1	24	256	Wheel Maria (Hayle)	18	12
256	Herodcombe	24	9	1024	Wheel Maria	1	250
256	Herodfoot	14	18	4000	Wheel Martha Consols	5	2
10000	Hibernian	124	14	512	Wheel Mary Ann	5	25
—	Hobbs Hill	4	3	256	Wheel Mary Consols	38	25
1000	Holmbush	19	8	256	Wheel Mary (Lanivet)	64	4
927	Kirkcubrightshire	5	3	256	Wheel Mande	124	14
2048	Lambert & Wh. Maria	9	3	128	Wheel Pollard	122	12
244	Lanivet Consols	1	24	210	Wheel Prospect	4	7
200	Larkhols	1	3	120	Wheel Reeth	27	30
128	Leland Consols	90	60	128	Wheel Rose	60	45
150	Levant	—	90	2048	Wheel Samson	—	20
1000	Levis	18	64	99	Wheel Seton	214	1000
1280	Lincynfellin	6	—	256	Wheel Sisters	294	35
1000	Lwyn Males	5	—	256	Wheel Sophia	34	10
256	Lowwithiel Consols	7	6	128	Wheel Spargue	10	75
128	Ludcott	3	3	128	Wheel St. Ann	10	75
4000	Marke Valley	10	—	256	Wheel Trelawney	77	115
5000	Mendip Hills	2	1	256	Wheel Tremaine (St. Ervan)	14	20
—	Merionethshire Slate	11	13-2	256	Wheel Tremayne	35	35
—	& Slate Slab Co.	11	13-2	128	Wheel Trew	20	21
9000	Mining Co. of Ireland	7	61	92	Wheel Trevena	3	4
256	New East Consols	25	3	256	Wheel Tryphena	140	265
128	North Fowey Consols	31	30	128	Wheel Venland	122	10
100	North Pool	45	320	256	Wheel Vlow (Perranz)	8	8
70	North Roskar	104	375	184	Wheel Vyvan	—	60
512	North Teburbet	2	3	256	Wheel Williams	6	16
100	North United	72	15				
256	North Wh. Abraham	8	12				
362	North Wh. Leisure	14	34				
128	North Wh. Providence	2	8				
15000	Northwestern Consols	2	2				
1200	Old Delatote Slate Co.	25	30				
128	Parr Consols	900	1000				
256	Penhallow Moor	15	4				
4000	Penant	1	24				
100	Pennarh	30	65				
256	Pentuan Wh. Mary	24	6				
128	Perry & Ceffn Mine	50	55				
1280	Perran & Gwennol	15	20				
512	Perran Wh. Virgin	94	15				
512	Plymouth Wh. Yeoland	44	22				
2048	Prince Edward	14	14				
112	Providence Mines	35	45				
256	Redruth Consols	3	2				
10000	Rhymney Iron	60	30				
10000	Ditto New	7	64				
1000	Rose Hill	10	12				
1000	Rosewell Hill	—	12				
256	Rosewarva Mines	—	12				
—	Shotts Iron Company	50	65				
2500	Silver Valley	4	2				
128	South Caradon	10	450				

NOTICES TO CORRESPONDENTS.

It will at all times be much trouble, and frequently considerable delay, if communications are simply directed—
To the Editor,
Mining Journal Office,
25, FLEET STREET, LONDON.

Also, to avoid trouble, Post-Office Orders should always be made payable to WILLIAM SALMON MARSHALL, as acting for the proprietors.

"A Subscriber" (Newport).—Mr. Bruff has not yet published the Third Part of his *Engineering Field-Work*; and, indeed, does not appear likely to do so for some time. We understand Mr. John Weale, the bookseller, of Holborn, is preparing a 10s. book on *Field-Work*, and the practice of measuring-up and taking-out quantities, which is an essential—and, we believe, will be a valuable—work at this period, particularly for young men entering the profession. We do not know the price of Mr. Cliffe's *Book of South Wales*; it can be procured of Mr. W. Rees, Llandovery; Mr. E. Hoath, or T. Fawcett, Monmouth; Mr. H. Oldland, Corn-street, Bristol; Mr. Jew, or T. R. Davies, Gloucester; and of the London agents, Messrs. Hamilton, Adams, and Co.

ADOCK'S GREAT FURNACE.—We shall shortly publish a descriptive account, with illustrations, of this invention, respecting which there appears to be considerable interest entertained by mining proprietors and others; and we are glad to find the patent is likely to be the advantage attending its extensive adoption. A pamphlet, prepared by Mr. Adcock, can be had at our office—price 6d.

MANAGEMENT AND MANAGEMENT BASE.—"A Shareholder" should attend the meeting of the company, on the 4th of next month, and there explain the conduct of the official referred to—the directors, doubtless, will render proper explanation.

T. W. (Leeds).—We shall feel obliged for the information.

The series of papers on the Silver and Gold Mines of the New World will be resumed in our next.

We have had several complaints of irregular delivery of the Journal lately. We can only say, that they were all duly dispatched from our office—where the blame rests, if not with the Post-office authorities, we cannot tell.

Received.—Mr. De la Haye, on Railway Communication between England and France. —On Gun-Cotton, &c.—Mr. Walker, on Improvements in Ship-building.—"Victor." —"W. M." (should address the secretary).

THE MINING JOURNAL is published at about Eleven o'clock on Saturday morning, at the office, 25, Fleet-street, and can be obtained, before Twelve, of all news agents, at the Royal Exchange, and other parts of London.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, JULY 31, 1847.

From the usual annual returns of the imports and exports of copper, copper-ore, and copper and brass manufactures, it appears that the greatest amount of duty received on foreign copper in a raw and manufactured state, from 1824 to 1846, kept for home consumption in any one year was 37500l.—the amount varying in those years from 7581 upwards; in 1842 it was 18147; in 1843, 13617; in 1844, 15187; in 1845, 21317; and in 1846, 17627. The amount of duty on foreign copper ore imported from all parts was, in 1842, 15,6877; in 1843, 64,4457; in 1844, 75,2017; in 1845, 58,6467; and in 1846, 54,0567.—showing a falling off, between 1844 and 1846, of upwards of 21,0000l. Of these quantities in the past year, Cuba sent 31,766 tons; Chili, 13,565 tons; Peru, 1328 tons; and other parts, 4963 tons—making a total of 51,623 tons; and showing a decrease, as compared with 1844, of 6782 tons; and with 1845, of 5074 tons. The quantities of British copper and foreign, previously charged with home consumption duty, was as follows:—viz., to France, bricks and pigs, 1845, 6124 tons; in 1846, 4406 tons; brass and copper manufactures, 13,9447 in 1845; and in 1846, 14,5207. To the United States of America, bricks and pigs in 1845, 605 tons; 1846, 262 tons; manufactures in 1845, 151,7927; and in 1846, 184,9327; to other parts, bricks and pigs in 1845, 3056 tons; in 1846, 2611 tons; manufactures in 1845, 681,1757; 1846, 689,5937.—making a total of bricks and pigs, 1845, 9786 tons; and 1846, 7279 tons—being a decrease of 2507 tons—while in manufactures there has been a surplus of 42,1347; from 846,9117 in 1845, to 889,0457 in 1846. The amount of foreign copper, exclusive of ore exported from bond, has sadly fallen off; to France, from 6799 tons in 1842 to 36 tons in 1846; to the United States, nothing; and to all parts, from 10,046 tons in 1842, to 363 tons in 1846. Here, then, is a falling off in our exports of metallic copper, since the imposition of the present duties in 1842, of 9698 tons, which, at the lowest price quoted of 977 per ton, gives a money value of 939,3217 lost to England in her commercial transactions; and as there is no doubt much of it is far above that value, the loss will far exceed a million sterling. From 1833 our exports of metallic copper to all parts had gradually increased from 1726 tons to 10,046 tons in 1842; but, in 1843, they fell to 353 tons; in 1844, a little improvement took place—the exports in that year being 1250 tons; in 1845 they fell to 294 tons; and in 1846 were 363 tons. If this diminution and fluctuation in the trade is not the result of the alteration of the duties, we are at a loss to know to what the friends of the duties can possibly attribute them; and we trust these statistical references will urge on the friends of their repeal to follow up their opposition until they are no longer a stain to the statute book.

Mining operations, when conducted with prudence, due spirit, and caution, generally turn out profitable investments; but when, as in the case of South Australia, mining assumes the form of a mania, then the rash speculators must expect to sustain a loss. There is, however, reason to believe that the mania in that colony is now declining, owing to the unproductiveness of a large portion of the recent land purchases, which were understood to contain minerals of a very rich character; and, most undoubtedly, something was needed to check, what was termed by many persons, the "copper madness," for not only did it infect the monied classes, but small tradesmen, whose attention to, and means of increasing, their business were thus diverted into channels quite foreign to the judicious investment of their profits in trade. Shopkeepers were said to have left their homes for the hills around Adelaide, armed with a geological hammer, and a bag to contain the so-called specimens of copper ore—every hillock was examined within 50 miles of the town—stones were broken from projecting pieces of rock—safely lodged in the assiduous mineralogists' bag, and brought home, after much toil and anxiety, lest the locality, from which the specimens were taken, should be known by some previous traveller in search of copper ore. In due time the land on which this very valuable mineral deposit exists, is surveyed, and offered for sale by public auction—buoyant hope fills the shopkeeper's imagination, and the section is knocked down to Mr. —, while his friends congratulate him on his fortunate purchase. Accompanied by an experienced miner he visits his property, when, alas! the report of that functionary is unfavourable: the appearances of ore that indicated an inexhaustible source of wealth, not having been of the right kind; and to his great disappointment, he finds that he has expended all his capital in the mere acquisition of the land, and that to ascertain whether lodes of ore exist, requires an amount of money to which he cannot lay claim. His hard-earned savings of three or four years are thus locked up in an unprofitable piece of ground; he feels chagrined at his non-success, but never anticipated that working a mine, even in South Australia, involves both skill and capital. It is the knowledge of this fact that has, at last, tended to repress undue mining speculation; and no circumstance can more forcibly support our statement than this—that the Burra Burra proprietors have spent large sums in raising the ore for shipment; and, although that mine has paid, and will pay, most handsomely, yet for a time their financial measures were confined wholly to the debtor side of the account, nor could we reasonably expect that the result of their spirited exertions would have been so favourable, had they not possessed the requisite capital with which to prosecute their mining operations.

The Kapunda Mine (the richest in the colony) has also needed capital to work it—in proof of which we may mention, that Capt. Bagoor has ordered machinery from England, including a powerful

steam-engine, to draw the water from the shaft—the want of which had obliged him to reduce for a short time (about January last) his mining force. The other South Australian mines, when efficiently worked, will, no doubt, yield profitable returns—among which those possessed by the Australian Mining Company, where the operations, as stated in last week's Journal, are being carried forward with great vigour and high promise of success; and the South Australian Company's mine at Mount Barker, also promises very favourably. But a small quantity of ore (we understand about 300 tons) has yet been received from that mine, owing to the scarcity of labour which existed for some time after the purchase of the property in December, 1845. We trust that want has now been supplied—the emigration commissioners having dispatched a large number of free emigrants, principally miners, selected by their active agent, Mr. J. B. Wilcocks, of Plymouth. The presence of good miners in South Australia will tend more fully than hitherto to develop the mineral resources of that flourishing colony.

In another column will be found a lengthened report of the proceedings at a meeting of the shareholders in CAMERON'S STEAM COAL COMPANY, and it is with much pleasure we congratulate the shareholders on the success which has attended their operations, and the bright prospects held out for the future. It appears, that in the short space of some 18 months, the company has arrived at that position, as to justify the directors in declaring a dividend after the rate of 12½ per cent. out of the profits. This is highly encouraging, and tells well in favour of the management, as in all instances with the establishment of new companies, a large outlay must be necessarily made in the onset, and, moreover, the difficulties attendant on the introduction of a new article in the market has to be contended with. It appears, however, that the quality of the coal has been universally admitted, and that the demand is more than equal to the "output." On the completion of the railway, the operations of the company promise to be on a most extended scale, judging by the figures put forward in the report. We may, *en passant*, observe, that the services of the directors have been heretofore gratuitous, which has been handsomely acknowledged by the vote of the proprietors. It is pleasing to see directors and shareholders thus pulling together; and we hope, having commenced with so much good spirit, that they will be cheered on by increased success.

In our columns of to-day will be found a report of the half-yearly meeting of the UNITED MEXICAN MINING ASSOCIATION; and, considering the agitated state of the country, the insecurity of all commercial pursuits, and the alarm, suspense, and anxiety, which are naturally felt by all parties, in consequence of such internal strife, the report of the directors may be considered decidedly favourable. On a perusal of the report, it will be observed, that the earnings of the association had increased nearly \$28,000, as compared with the previous year; and whatever falling off there may have been in other departments of the establishment, they are to be attributed to the state of the country, the scarcity of labour, the high price of quicksilver, and other circumstances, and by no means from any apparent depreciation in the property or prospects of the association. With respect to the payment of a dividend, which was suggested by a proprietor, however small, we think, with the chairman, that, notwithstanding there is an available asset in hand of nearly 50000l., in addition to the 50000l. reserve fund, while further remittances may be shortly expected, it is the safest plan to keep a good balance in hand in case of emergency; and that, while a 5s. dividend, taking over 10,0000l., would be a respectable return to the shareholders, less than that amount looks only like a sop thrown to CHERUBS under some sinister design: we have, on several occasions, within the last few months, expressed this opinion, with regard to the payment of insignificant dividends.

WALKER'S PATENT HYDRAULIC ENGINE.

On Saturday, the 24th inst., a number of scientific gentlemen, and proprietors of estates in the colonies and at home, assembled in the Wharf-road, City-road, to witness the performance of an hydraulic engine, just completed by Mr. Walker, for the estate of Messrs. Denson, in Barbicoe. The machine consists of a table, upon which are mounted two steam cylinders, each 11 in. in diameter, and immediately under them are placed two water cylinders 2 ft. in diameter. From the cross-heads of the steam piston-rods, connecting-rods pass down, and are bolted to the platforms upon which the water rams, or pistons, are mounted. The water cylinders are open at the bottom, and are immersed in a cast-iron well, fitted with sluices, to admit the internal water from the drains, or the external water from the river, so as to be equally available for the purposes of draining, or of irrigation. The water cylinders terminate at the upper part in a capacious valve-box, communicating with the delivery main, which is also furnished with sluices for delivering the water raised, either inward or outward, according as the engine is employed at the time, for draining, or otherwise. The valves on the water cylinders and pistons are of a novel and excellent construction, and consist of a large number of rolled tubes, which lay in circular seatings, rising and falling within guides, which limit their action. By means of this arrangement, a large and very free water-way is afforded for the passage of the water; while the action of the valve is entirely free from anything like a blow, or jar, even when working at a high velocity. The steam cylinders are single acting, the steam being admitted alternately beneath the pistons by a slide-valve placed between them, and worked by an eccentric on the crank shaft, which connects the two steam pistons, and carries a fly-wheel, to regulate the action of the machine. After leaving the cylinders, the waste steam enters a hot water box (tubular in its construction), where the water raised by the cold water pump is made to boil, and in that state sent into the boiler. The engine was constructed for a lift of 8 ft., and with steam of 35 lbs. on the inch, making 70 revolutions per minute—it raised 6000 gallons of water per minute. This is the second engine completed by Mr. Walker for the West Indies, and the performances of both have given the most unqualified satisfaction to the numerous parties who had an opportunity of seeing them in action. As these engines throw up the water—not lift it—the ordinary mode of computing the performance of the engine (by its capacity multiplied by the speed) is inapplicable. At the speed stated, this mode of calculating gave barely half the quantity of water actually raised by the engine, and at an increased speed the disproportion would be much greater. Hydraulic engines upon this principle have been put up by Mr. Walker for the Parliamentary Commissioners for draining in Somersetshire, Norfolk, and in Lincolnshire. At the estate of Mr. Bault, Rendham, in Norfolk, a large tract of land is this year growing the very finest corn, that has never before been cultivated, from the impossibility of draining it by the means heretofore employed for that purpose. By Mr. Walker's engine (with greatly-diminished power) this has been effectually accomplished. The gentlemen connected with estates in the West Indies have watched the completion of these machines with great anxiety, and they are now satisfied that these engines will entirely avert the only two evils of any magnitude they have now to contend with—alternate floods and drought.

Mr. Walker's engine is exceedingly compact—occupying a space of less than 4 ft. square, and is so simple that any labourer can be taught to manage it in half-an-hour. The superiority of Mr. Walker's patent engine over the ordinary pump has been most satisfactorily established at Woolwich Dockyard. The caisson there was formerly emptied by means of a pair of very excellent 10-in. pumps, fitted up in the best manner by Messrs. Rennie. With these it took 30 men, working in gangs of 15, and relieving each other every 10 minutes, three hours and a half to empty the caisson. By Walker's engine, 14 men, working in gangs of seven, and changing every 15 minutes, emptied the caisson in ONE HOUR AND A QUARTER, and have, upon recent occasions, done it in less, without being fatigued. Now that agriculturists are becoming convinced of the vast importance of effectual drainage, and every mechanical expedient for facilitating that object is received with thankfulness, there can be no doubt that the value of Mr. Walker's invention, as a simple, powerful, and economical mode of raising large quantities of water, will be duly appreciated.

THE DUCHY OF CORNWALL—ANNUAL RETURNS.

INCOME.	
Rents and arrears received during the year ending 31st Dec., 1846	£18735 0 11
Fines on copyhold grants in the manor of Kennington	1869 8 5
Dividends on stock, being the produce of sale of land under the Land Tax Redemption Act, and sales, grants in the under Act of Parliament, and interest on money advanced upon purchase of beneficial interests	609 19 6
Compensation in lieu of tin colliage duties, post grants, and white rents	18741 15 4
Produce of royalties of the coal mines in the county of Somerset	2972 1 3
Produce of royalties and reservations of dues of mines in Cornwall and Devon	2520 7 10
Stannary Court fees and other casual revenue	467 15 10
Repayment out of the inheritance, being money advanced to the Assessable Manors Commissioners	2005 19 0
Balance remaining on the account of the Receiver-General, to the 31st of December, 1845	6474 9 14
Total revenue	£30,395 14 3

EXPENDITURE.	
Salaries and allowances to the principal officers of the Duchy, and their establishment of officers and clerks	£5185 0 6
Salaries, allowances, and other expenses connected with the new Stannary Court	1197 10 0
Salaries and allowances of all other officers, receivers and agents employed in the collection of the revenue	3371 1 4
Superannuation allowances and annuities	2038 18 0
Donations and charities	1029 12 4
Law charges	187 6 10
Tithes and expenses of tithes apportionments	483 4 3
Surveys and maps	314 12 1
Autuities and incidental expenses	387 15 5
Disbursements and incidental expenses	801 1 6
Repairs and permanent improvements	56 10 4
Payments to the trustees and treasurer of his Royal Highness	1202 10 0
Imprest on account of the Assessable Manors Commission	2000 0 0
Investments in the purchase of beneficial leases	2000 0 0
Repayment of loan advanced by the bankers, with interest thereon	2020 16 5
Total expenditure	£30,395 16 5

Leaving balance in hand.....£14,438 17 6

Making a total, as above, of.....£30,395 14 3

The following is an enumeration of the salaries and allowances to officers, receivers, and agents, included in the above return:—

To John Lucas Dampier, Esq., Vice-Warden of the Stannaries in Cornwall, one year, ending Christmas, 1846	£750 0 0
To Mr. P. Smith, his secretary, for three-quarters of a year, to Michaelmas, 1846	37 10 0
To William Michel, Esq., registrar, one year, to Christmas, 1846	250 0 0
To Mr. Richard Wessinger, assistant registrar, for the same time	100 0 0
To Mr. William Clyma, collector, for the same time	30 0 0
To Richard Taylor, Esq., mineral surveyor and engineer, one year's salary, to Michaelmas, 1846	800 0 0
Idem, for travelling expenses	139 0 0
To Mr. John Williams Colenso, mineral agent, salary for three-quarters of a year, to the same time	165 0 0
To Mr. John Williams Colenso, mineral agent, salary for three-quarters of a year, to the same time	60 0 0
Idem, for travelling expenses	117 17 8
To Mr. Thomas Deans, underground surveyor of coal mines, for half a year, ending Christmas, 1846	65 0 0
To the Rev. J. H. Mason, for expenses of the deputy-foresters of Dartmoor	21 0 0
Idem, being a per centage on the Dartmoor rents of 1845	30 6 1
Robert Watt, Esq., land agent, for the year ending Michaelmas, 1846	400 0 0
Idem, for travelling and other expenses	234 19 8
Samuel Ward, Esq., for salary and expenses, as steward of the Somersetshire Manors, from the year 1844 to 1846	343 17 6

Superannuation Allowances and Annuities.

To Thomas Abbott, Esq., superannuation for two years, to Christmas, 1846	1500 0 0
To John Williams Colenso, Esq., late comptroller of the coinage, for three-quarters of a year, ending Michaelmas, 1846	150 0 0
To Mr. Robert Cornwall, late first clerk in the Duchy Office, one year and a quarter, to Christmas, 1846	175 0 0
To Mr. William Jory Henwood, late one of the supervisors of tin, for the year ending Michaelmas, 1846	60 0 0
To Mr. John Parkin, late supervisor of timber and repairs, for five quarters, ending Christmas, 1846	93 15 0
To Mrs. Scott, annuitant, for the year ending Michaelmas, 1846	50 0 0

Making total of salaries, &c.....£5687 6 4

COPPER MINES OF NEW JERSEY.

MINUTES OF A RECENT VISIT TO THE FLEMINGTON, NASHANEE, ALLEGHANY AND SCHUYLER MINES.

In company with others, I left Philadelphia some days since in the New York line, and after arriving at Trenton and dining, we hired a conveyance and proceeded by the way of Pennington, Suddertown, Recktown, and Ringoes, to Flemington, a distance of 23 miles, where we arrived at early tea time, having passed through a hilly and well cultivated country, and remarked nothing peculiar but wretched out crops, indifferent wheat crops, and the plain effects of an unusually cold and dry season upon vegetation generally.

We stopped at "Hart's" Hotel, and soon had the pleasure of an introduction to Messrs. Gay and Osborn, the superintendent and chemist of the Flemington Mines, from whom we learned many agreeable details respecting them.

We found Flemington an attractive looking town of about 600 inhabitants, with several handsome churches, an academy, public library, handsome stone court house, &c., which, with the private dwellings, are built mostly upon one main street. It is 45 miles from Philadelphia, with which it has a daily communication by stages.

The next morning we went to the mines with Mr. Gay, which are close upon the road lying over to the Delaware, and about half a mile from the town. Here we found a cluster of frame buildings, consisting of an engine-house, smelting-house, laboratory, store-house, office, smith's shop, horse-shed, &c., and between them various large heaps of ore and rock. After examining some rare specimens, and a correct map of the mines at Mr. Gay's office, we were provided with candles, and went down the "new shaft," and were taken in succession through the various drifts or workings, to where the miners were busy getting out the ore, which, for the last 40 days, has amounted to over 900 tons, containing 15 per cent. of copper. Emerging from this interesting, but somewhat dismal place, we visited the engine-house, smelting sheds, and roasting-heaps, and finished with pocketing specimens of ore, from the huge piles which now extend to near 800 tons. Judged to contain an average of 18 per cent. of copper—600 tons of this ore have been mined since the 1st of January, with an average of 16 hands. The present force is about 30 men, who take out 5 tons a day; which, if continued, will add 935 tons to the 800 new mined, or 1735 tons total for the year. This, at 18 per cent., would yield 310 tons of copper, which can be sold for \$350 to \$400 the ton; or, an aggregate of from \$100 to \$124,000. This grand result is based upon the idea of the company's entire success in smelting—of which there seems to be little doubt. Two new furnaces will be shortly erected at a very moderate cost, when the smelting will go on in a regular way; besides, the veins now being worked, there are others upon contiguous property, which have been secured. The capital stock consists of 10,000 shares, the par value of which is \$20, these have rapidly risen to 31, and if the operation continue according to present prospects, by the end of the year they will be worth three times this price.

The ALLEGHANY Mine is upon the northern side of the Blue Mountain, 7 miles above the Delaware Water Gap, in Warren county. Taking a private conveyance, we passed the Delaware Water Gap, a very hilly, yet well cultivated country, through the Glenside, Oxford, and Belvidere, to Columbin, a distance of 41 miles. We spent the night, and leaving at 8 o'clock next morning, went through the "Water Gap," and arrived at "Shoemaker's," a substantial tavern on the edge of the river, within three-quarters of a mile of the mine. Leaving our horses, and refreshing the "inward man," we walked to the ruins of an old saw-mill, where the company's property begins, and by a rugged path ascended several hundred feet to where the ore was at work. Here we were met by Capt. Ewing, the superintendent, who conducted us still higher, and along the crests of the mountain to the various diggings, giving us every opportunity to judge of the quality of the ore, and extent of the vein, which has been traced for more than a mile, dipping towards the river at an angle of about 35°. The average opinion is, that the ore will yield from 7 to 10 per cent.; but the large quantity, favourable position for working, with its close proximity to the river, and great abundance of wood for mining purposes and smelting, go towards placing it upon an equality with richer ores less favourably circumstanced. There are two old shafts in the mountain, out of which, according to tradition, ore was taken by the Germans before the Revolution—there are no buildings yet erected—we were told the property was bought for about \$30,000. The stock consists of 10,000 shares, and was recently run up to \$22 a share, but has since receded to \$16, or eight times the purchase money. It must necessarily be some time before this concern can get into operation, and pay a dividend upon the stock. On our return we crossed the river at "Shoemaker's," and passed down the West bank to Mrs. Broadhead's Mountain House, at the "Gap," certainly one of the most attractive of places—the views from the hill above the house being unequalled for grandeur, beauty, and extent. From here we passed on to Easton, and then across to Flemington, greatly preferring this to the route we went.

The SCHUYLER MINES are about one mile from Belvidere, in Essex county, on the borders of the wide marshy valley of the Hackensack, and may be readily visited from New York city, by the Newark trains, which leave several times a day. These mines and beds were very extensively and profitably worked many years since; there are some eight or ten men now at work, the most of them in clearing out the old shafts and drifts—there were no buildings erected but a small stone office. The ore is of rich quality, and 40 or 15 tons already mined—we were told the present company are to pay \$75,000 purchase money for their concern. The stock consists of 30,000 shares, and has recently sold at \$13, but can now be bought for less; this, like the Alleghany, must be in successful operation for some time before the stockholders can hope for a dividend.

The writer is disposed to believe that the time is not far distant when a vast return will result from the mining of copper ores in New Jersey; the indications are already so numerous, and increasing every day, and the ore so valuable when mined, that this would seem to be an inevitable consequence.—E. J. Philadelphia, May, 1847.—West Britain.

A large additional profit arising from it—the ore alone, yielding 18 per cent., is worth \$50 a ton.

† Several hundred pounds being the result of the recent experiments with the new furnace. In the same way as English orders in council, and the corn-laws made the United States a manufacturing people, so the high duties in England on foreign copper ore are making them a smelting one. The British Government, and others, were warned of this several years ago, but it was of no use. The Boston and Baltimore furnaces are a successful operation.

PROGRESS OF FRENCH MINING INDUSTRY.

(FROM OUR PARIS CORRESPONDENT.)

Very ugly rumours continue to circulate with respect to the manner in which the right of working mines has been conceded in Africa. From all accounts, it appears that Ministers of the Crown, and eminent functionaries of the Government, have associated themselves with particular companies, and have thereby either flatly refused concessions to other companies, or have imposed upon them most onerous conditions. Among other things, it appears, that because the company, headed by M. Talabot (the favoured company), found it more advantageous to bring ores to France to be treated, than to treat them in Africa, the company of Meuboudja was compelled to bring its ores to France also, notwithstanding it was most desirous of being allowed to treat them in Africa! The question, you are aware, has been a great deal agitated, as to which of these two systems was the best; but, notwithstanding there may have been "a great deal to be said on both sides," there cannot be a question, that it was a most scandalous thing for the Government to constrain a struggling company to adopt that system, against which it earnestly protested, as contrary to its interests. Such a plan is enough to disgust practical men, with all mining enterprises in Algeria; but, perhaps, that is the very thing that is sought to be attained, for then all the mineral wealth which Algeria is said to possess would become the monopoly of a few favoured individuals.

A strange exposure has been made this week with respect to these Algerian mining affairs. A person, named Rambour, has brought an action against two brothers, named Henry, and other individuals, the concoctors and managers of a company for working the mines of Mouzaia, to recover from them a sum of about 12,500 fr., the amount he had paid for a number of shares in the company. At first, the capital of the company was fixed at 20,000,000 fr., divided into 500 fr. shares, and the complainant bought a number of shares at that price; but, subsequently, the capital was reduced to 4,000,000 fr., and the shares to 100 fr. The plaintiff, however, could not get back the difference between 100 fr. and 500 fr. per share which he had paid; and, therefore, it was that he had brought his action. The defendants refused to repay the difference, contending that the 400 fr. represented the premium on the shares, though, in point of fact, the shares were never at a premium at all. The decision of the court has not yet been given. The case, as here stated, appears very simple, and simple it is in reality; but mark the extraordinary disclosures that were brought to light. First, the right of working the Mouzaia Mines was conceded to the two brothers Henry for a rent of 180 fr. per annum, to be paid to some Arab chiefs—a rent of 10 fr. per kilometre per annum, to be paid to the French Government—and a per centage in no case exceeding 5 per cent. on the value of the ores extracted, also to be paid to the French Government—altogether, these charges did not amount to 20% per annum. Yet the Henrys had the astounding assurance to demand 20,000,000 fr. (800,000l.) for working mines let for 20% a year! For turning over their concession to the company, they reserved to themselves shares to the amount of 4,000,000 fr. (or, as the deed was worded, it might be interpreted to award them 16,000,000 fr.), two places each of 12,000 fr. (480l.) a year, and 6 per cent. on the gross produce of the sales effected by the company!

Nor was that all:—these men actually stipulated in their deed of sale, that on their deaths they should be succeeded in their offices by their sons, or any one of their relatives of the same name—that, in fact, their places should be hereditary in their families during the whole period fixed for the existence of the company, which was 99 years! You will think that I am trying to impose on you by this improbable statement; but no—it is strictly true. And, wonderful to relate, unhappy lunatics were found who took shares in this precious concern, with its hereditary managers! But the thing was found to be too strong even for the lunatics, and so the Henrys set aside the deed, and the 20,000,000 fr., and the 12,000 fr. a year, and the 6 per cent., and the hereditary succession. They then established this company on a new basis. They fixed the capital at 4,000,000 fr., which was more reasonable than 20,000,000 fr., but still enormously exaggerated; and only took for themselves shares to the amount of 2,000,000 fr., with 3 per cent. on the gross sales, with well paid places, and with 200,000 fr. for expenses, which they pretended to have incurred! And all this was accepted by the gullible shareholders! Who would have believed that the world contained such asses.

In the first *acte*, as it is called of these Messieurs Henry, was a very mysterious clause, to the effect, that they should be authorised to employ 10,000 fr. every year for the good of the company, without being called on to render any account of it. They may have meant to divide that sum between themselves, but it is very generally suspected that it was destined to be employed in corrupting Government officials. It is not a little singular that a similar clause existed in the *acte* of the Gouhenans Mining Company. Whether the same clause appears in the present *acte* of the company, headed by the Henrys, is not stated, but, probably, it does. Whether, however, it does or not, it seems certain that corruption, or at least something very like it, has taken place in the concession of these Mouzaia Mines. The truth will, no doubt, soon be ascertained. I have gone at some little length into this case, because the facts of it set forth a lesson which is really important. Efforts are, I know, making, and are to be repeated with still greater energy, to induce English capitalists to dabble in the mining speculations of Algeria. If any of your readers should be disposed to embark in any of those Algerian undertakings, he would do well to examine with the greatest attention the deeds which regulate them, and to ascertain from sources on which he can rely, that the capital of the companies is in proportion with the real value of the mines to be worked. But, if the reader will allow me to give him a word of respectful advice, I would say:—"Have nothing at all to do with the Algerian Mines—do not believe all the fine representations that are made respecting them—do not even believe the solemn statements of Government functionaries; and be assured that, if any mine should pay its expenses, it will not pay for several years to come, and that even then the lion's share of the profits will be taken by the concoctors and managers. Besides all this, remember that though Algeria be in the possession of the French at present, they are, by no means, sure of being able to hold it."

The Committee on the Customs Bill has at last concluded its labours, and has presented its report to the Chamber of Deputies. But, with a due regard for the interest of the ironmasters, which is, as they think, likely to be greatly affected by the clause allowing the free importation of sheet and other iron for shipbuilding purposes, they only presented the report on the very last day on which the deputies assembled, so that the threatened encroachment on their monopoly is effectually thrown over for the present year, and, perhaps, also for the year following. In my next I shall be able to give you an abstract of the report. It is to be regretted that it has not yet been published, for it is a matter of considerable curiosity to see what the Committee has had to say on the iron monopoly in general, and its effects on the shipping interest in particular, especially as it made such a pompous parade of investigating the matter to the very bottom, and of giving an impartial decision on it.

The session of the deputies has terminated without the long-threatened motion against the General Company of the Coal Mines of the Loire having been brought forward. This is certainly very remarkable, considering the formal pledges made by the deputy of Saint Etienne to obtain the judgment of the Chamber on the constitution of the company. I apprehend he will be called over the coals by his constituents. They seem to be as obstinately opposed to the company as ever. One little fact will show the extraordinary unpopularity of the company. The editor of one of the journals of St. Etienne has brought an action for libel against the editor of another paper, the libel being to the effect that his newspaper was created by the company as its organ!

Touching this company, strange rumours are current. When its accounts were published some time ago, people were surprised to observe a very large sum put down under the title of "Preliminary Expenses of forming the Company." It is now asserted that great part of this money was spent in an illegitimate way—in plain English, in bribing Government officials!

Some of the journals mention that large numbers of the miners of this company have struck work, and have been on the strike for the last ten days. Neither the St. Etienne newspapers, nor private letters from that place, make mention of anything of the kind. It may, therefore, be concluded that the statement is unfounded.

Returns have been just published by the Customs department, which show that the increase in the importations of cast-iron and coal continues without interruption—a fact which is the more remarkable from their being a falling off in the importation of all other articles. In the month of June last, the importation of cast-iron was 97,616 metrical quintals—whilst in June, 1856, it was only 85,166 metrical quintals. In the first six months

of the present year, the importation has been 512,155 metrical quintals; same period last year, only 420,393. The greater part of the cast-iron imported comes from Belgium. The importation of coal in June, 1847, was 2,310,663 metrical quintals; and in June, 1846, 2,128,976. In the first six months of this year the importation was 10,716,858 metrical quintals; and the same period last year, only 9,650,658 metrical quintals. The greater part of the coal imported, comes from England. The importation of copper, during the first six months of the present year, was 48,728 metrical quintals, against 29,067 imported during the same period last year, which shows a remarkable increase. In June, 1847, the importation was 9024 metrical quintals; June, 1846, 8908.

The last St. Dizier letter, dated the 22d, says—that the beaten iron was at 370 fr. for Paris, and 380 fr. for the provinces; the flattened iron at 370 fr. and 380 fr., delivered at St. Dizier. It adds, that for a long time no purchases of white cast-iron had been made at the furnaces, composing the St. Dizier group, in consequence of which several months' supplies was in bond. Only 170 fr. were offered to be taken at the furnaces; and it was believed that the first transaction would take place at that price.

Meetings of the shareholders of the Coal-Pits of Fergues and des Touches, are called—the former for the 9th; the latter for the 12th of August. The shareholders of the Furnaces of Valence and Sayons have removed the managing director from his situation, and put M. Gauthier, the engineer of the Furnaces of Lavoulte, in his place.

The directors of the Asturias Mining Company, inform their French shareholders, by public advertisement, that, if the calls due on the shares be not paid up before Saturday next, the shares will be forfeited to the company. The shares on which calls are unpaid are not numerous.—Paris, Wednesday.

BELOIUM.—The following statement shows the increases that have taken place in the import duties in metallurgical products, as well as the present amount of such duties; it will be observed, that, in some of the articles, the increase has been really scandalous, considering the high rank which Belgium metallurgy bears among that of European nations.

Description of Articles.	Laws, &c., fixing the duties.	Basis on which the duty is levied.	Amount of import duty.
Iron ore	August 26, 1822	100 frs.	0.750 c.
Cast-iron, <i>en gueuses</i> , of the first fusion	March 1, 1831	100 kilograms	0 53
Ditto ditto	March 1, 1831	"	2 12
Ditto ditto	April 13, 1843	"	5 0
Ditto ditto	February 8, 1844	"	0 53
Cast-iron <i>epuree</i> , or for <i>moullet</i>	August 26, 1822	"	13 35
Ditto ditto	March 1, 1831	"	13 35
Wrought, cast-iron, and utensils and works in iron	August 26, 1822	"	13 35
Forged-iron, in bars, &c.	March 1, 1822	"	9 1
Ditto ditto	August 26, 1822	"	12 72
Iron, <i>feuillee</i> , in <i>crisles</i> and bands	July 29, 1845	"	21 04
Works in beaten-iron and sheet-iron	August 26, 1822	"	25 0
Nails	July 29, 1845	"	25 0
Iron wire and anchors	August 26, 1822	"	13 35
Old iron, &c.	"	"	6 89
Ditto	March 1, 1831	"	prohibited
Iron or brass ware, <i>en vrac</i>	August 26, 1822	"	12 72
Ditto, not <i>en vrac</i>	March 1, 1831	"	prohibited
Tin, not wrought	August 26, 1822	"	2 10
Ditto, wrought, and painted or varnished articles	March 1, 1831	"	prohibited
Steel, in sheets, bars, &c.	August 26, 1822	"	13 35
Wrought-steel, steel articles, tools, &c.	March 1, 1831	"	10 0
Steel wire	April 26, 1822	"	1 6
Machines and mechanical pieces—			
Steam machines, fixed	April 11, 1827	"	16 96
Ditto, portable	March 1, 1831	"	13 35
Steam-engines, for navigation	October 13, 1844	"	16 96
Locomotives, without tenders	April 11, 1827	"	13 35
All kinds of machines (not for steam), not especially mentioned in the tariff	October 13, 1844	"	25 0
Tenders, boilers, gasometers, &c.	August 26, 1822	"	13 35
Detached pieces of machines, in cast-iron	October 13, 1844	"	20 0
In iron	August 26, 1822	"	21 94
Screws, tools, vices, &c.	October 13, 1844	"	25 0

N.B.—The manufacturers of steel have the right of introducing, free of duty, all the iron they may require. Some idea may be formed of the development of mining industry in this country, from the fact, that, in 1831, only 86,772 frs. were required for the mining department of the Ministry of Public Works; whilst, in 1841, the amount necessary was 244,100 frs.; and in 1847, 273,800 fr.—A general meeting of the shareholders of the Coal Company of Lodelinsart is called for the 12th of August.

IMPORTATION OF ZINC.—Several very large importations of spelter or zinc have taken place within these few days, one vessel having brought 5743 packages, another 10,232 plates, and others nearly 100 tons weight of this article, the production of Prussia. This zinc or spelter, by both which names it is equally well known, is a metal of considerable hardness; and, although but little malleable, is easily made into plates, by passing it through the rollers of a mill adapted for the purpose; its colour is that of a bluish-white; it oxidises with difficulty, and lately has been much used in this country for various purposes, such as gutters for houses, vessels for containing water, pipes, and other articles; and more recently, also, for the manufacture of door-plates, in preference to brass or other material; it has also been drawn into a wire, for which a patent was obtained by the inventor in one of the towns in the north of England.

MINING IN ALGERIA.—We stated, in our last Journal, that mining enterprise is rapidly extending in France, and the demand for metal of all descriptions, particularly iron, is increasing to such an extent, that, notwithstanding the monopoly, and the large establishments of the forge masters, such demand cannot be half met, and they must, though much against their will, have recourse for years to come to England and Belgium. The exorbitant prices exacted by the ironmasters, for rails, and every material connected with railways and shipbuilding, has given an unexpected impetus to mining enterprise, by large capitalists, who hitherto have been unconnected with the metal trade. Finding that France cannot supply ores in sufficient abundance, have turned their attention to the mineral riches of Algeria; and, as the Government are anxious that their possessions in northern Africa should be thoroughly explored, numerous concessions have been granted to adventurers. From the anxiety to obtain good ores of iron for the supply of the furnaces of France, mines of that metal are the most in demand; and among those who have obtained concessions in Africa are Messrs. Jules Talabot, M. Peron, Girard, Porret, Sentil, Marmer, and Tiron, Counts de Nèze and Clarry, and the Bassano Company, besides several others. These concessions are severally for mines of iron in the neighbourhood of Bona, the Lake Tsara, Mount Feltet, Cape Ferret, &c. A number of demands for other concessions have been made, but which have not been decided on. It is worthy of remark, that nearly the whole are for working iron ore, with which the colony abounds, and of which France is so much in need. There has been yet no coal discovered in Algeria, but it is said there are immense forests in the neighbourhood of the mines, which may be used for many years for smelting, if it would not pay for exporting to France for smelting there. Many emigrant settlers have already arrived, who are experienced in the making of charcoal. Notwithstanding all these spirited endeavours, we fear, from the limited resources of the colony in roads and water, it will be many years before the mines will prove successful and profitable undertakings, even should they turn out rich. A general meeting of the company of the furnaces of Metoudjah, in Algeria, is to take place on the 30th September next, and much interest is excited as to the result, as the report of the directors is expected to throw great light on the important question of smelting. The capital of the company is 60,000l. The commission on the project of law for the free importation of iron and other metals for the use of the merchant navy, presented its report only the last day before the end of the session, which is creating astonishment; and it is believed to have succumbed to the iron monopoly. Let the ministers, deputies, and peers of France bear in mind the fate of Teste.

MOUNT SAVAGE IRON-WORKS, NEAR CUMBERLAND, U.S.—We learn, from a Baltimore correspondent, that these works, which are owned and conducted by English and New York capitalists, have been suspended for some time, on account of the want of money to pay their hands; but, on Monday last, operations were resumed, and that no difficulty need be anticipated in future. There are several hundred hands employed at these works, and a suspension causes great distress.

MERIONETHSHIRE SLATE AND SLATE SLAB COMPANY.

We have, on various occasions, called the attention of our readers to the progress of this company, and the increasing production of the quarries, as they are becoming more fully developed. At Tally-Ho the slate and slab produced are of the most superior quality. Feeling it our duty, from time to time, to watch the progress of legitimate undertakings of this nature, which we consider it the peculiar province of this Journal to record, we have much pleasure in communicating to our readers, that the favourable opinion which we have entertained from the commencement of its operations, is more than fully borne out by the recent monthly returns of the quarry workings, and which show a very considerable per centage upon the capital expended. The following is a statement of the expected profit on a large surface of rock, expected to be uncovered by the third year; and the present appearances of the company's property hold out a promise, that the assumed profits will not be much above the mark:—

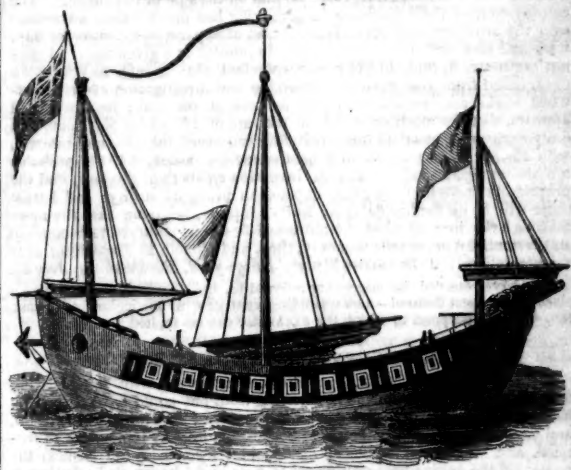
FIRST YEAR.—By sale of 2000 tons of inch slab at 6d. per foot, 8000l.; at 8d., 10,666l. 13s. 4d.; and at 10d. 13,333l. 6s. 8d.; make and delivery in London, 4100l.; establishment and working expense, 1619l. 4s. = 5719l. 4s.; leaves a profit at 6d., 2280l. 16s.; at 8d., 4947l. 9s. 4d.; at 10d., 7614l. 2s. 8d.

SECOND YEAR.—By sale of 3000 tons of inch slab at 6d., 12,000l.; at 8d., 16,000l.; at 10d., 20,000l.; deduct for above expenses from each, 7769l. 4s.; leaves profit at 6d., 4230l. 16s.; at 8d., 8230l. 16s.; at 10d., 12,330l. 16s.

THIRD YEAR.—By sale of 5000 tons of inch slab at 6d., 20,000l.; at 8d., 26,666l. 13s. 4d.; at 10d., 33,333l. 6s. 8d.; deduct for above expenses from each, 11,869l. 4s.; leaves profit at 6d., 8130l. 16s.; at 8d., 14,797l. 9s. 4d.; at 10d., 21,464l. 2s. 8d.

A considerable reduction in the make has been effected since the above calculations were made, as will be seen by the statement at foot:—Cost of make, per ton, 11s.; cartage, 5s.; boatage, 1s. 6d.; freight to London, 12s.; shipping, 6d.; insurance, 6d.; landing, 2s.; clearing, 5s. 6d. = 17. 18s.

THE CHINESE JUNK, KEYING



From the great curiosity excited by the announcement of the early arrival of a Chinese ship, in addition to the description which we gave in the *Mining Journal* of the 10th inst., we now avail ourselves of an opportunity of giving a further description, with a pictorial sketch of her form and general appearance, which we have just received from an American correspondent. The above engraving is a correct representation of her as she lies in the water. In shape, as in the manner of structure, the *Keying* is unlike any American or European vessel. She resembles a whale boat in form, and is incapable of greater speed than her appearance indicates. Nearly the whole vessel is made of teak wood, and her rudder, weighing seven tons, is so suspended by bamboo cables as to be hoisted or lowered at ease, and, when hoisted, she draws 23 ft. water, when in the water only 13 ft. Her anchors are made of iron wood, the shafts of which are 30 ft. long. She is 150 ft. long, 25 ft. beam, and 12 ft. hold, with general good proportion. Her cabin is large and airy, being 30 ft. long, 20 wide, and 10 ft. high, hung with a profusion of ornaments and paintings of wild beasts. Her masts are very upright, and hung with lateen sails, which are managed from the deck, as the celestial sailors dislike climbing; and one man to each mast at the balyards can either reef the sails or take them in, in one minute. Her colours are as unique as her build, her sides being painted white from the stern to the foremast, and red from thence to the stem, with a black strip of waist. Two huge and very knowing eyes perforate her bows, and her stern rises like a pagoda some 5 ft. higher than a full grown battle-ship, and is 32 ft. high from the water. She has also six small cabins on the first poop, with the joss-house in the centre, in which a light is constantly kept burning. Her ports, nine on each side, are coloured black, white, and red. She has been 212 days on the voyage, encountering some severe weather, and sailing at times 12 knots an hour. Up to this time she has cost over \$75,000. Her crew is mixed European and Chinese—about 20 of the former, and 40 of the latter. Capt. Charles Kellet, master. Among the latter are artists, carpenters, and other tradesmen. She has several idols on board—mostly representing females, with abundance of arms, and ornamented with various trinkets. Besides these, she has a large quantity of curiosities, embracing Chinese dogs with ink-black tongues, monkeys, pigeons, beautiful carvings in wood, with domestic utensils, fancy works, pictures, &c. Her masts are also teak. Bamboo and the bark of trees, rattan and Indian grass, serve for rope throughout the vessel. When she arrived, the Chinese portion of the crew were in an almost nude state—they have since donned Nankeen, which detracts much from their nationality. They are regular copper heads, with broad-rimmed hats fitting close upon the crown, and pig-tail cues reaching nearly to the feet. Unfortunately there are no women among them. This is an oversight—the women would have been the chief curiosity. Several of the men have a number of wives at home, and they are quite disgusted with our custom of only one. They use the "horse-whip" when their seragios get quarrelsome, so says their interpreter. Altogether she is a most interesting specimen of the produce and ingenuity of the natives of the celestial empire.

METROPOLITAN IMPROVEMENTS.—The Chelsea embankment and Battersea Park are now being rapidly proceeded with. The large manufacturers in that district have, we understand, for the most part, concluded with the commissioners, and no impediment now stands in the way of prosecuting this very desirable undertaking. Lord Morpeth, the other day, confidently assured the House, that no effort, on his part, should be wanting to expedite these public improvements. The lead-works of Messrs. Millins Brothers, at Battersea, we hear, will be carried on upon a more extensive scale in the Isle of Dogs, where the proprietors of the present establishment (whose site is required for the park), it is rumoured, have secured most eligible waterside premises.

FREIGHT FROM AUSTRALIA DIRECT TO SWANSEA.—The South Australian papers are canvassing the probabilities of the port of Swansea being made capable of admitting vessels of large burden, and thus enable them to ship their ores direct to that port, instead of to London, from whence they have to be reshipped to Swansea. The principal difficulty even in small vessels appears to be in obtaining return freights, and many masters of vessels refuse freights to Swansea, and go to the port of Liverpool instead. As it is highly probable, however, that floating accommodation will be afforded, there is little doubt, that when railway accommodation is perfect, the question of back freight can no longer be a bar, and a direct intercourse will be opened up between South Wales and the colonies.

BLASTING EXTRAORDINARY.—About a week ago, Mr. Lilbeck, of Fergues, blasted a freestone rock in his quarry at Beggars Gilt, with about 4 lbs. of powder, and succeeded in lifting an entire mass of stone, weighing about 30 tons, which was thrown about 9 ft. from its bed. The oldest quarrymen in the neighbourhood state, that they never knew an instance of such a large piece of unbroken stone secured at one blasting in their lives.—*Whitbaker Herald*.

Original Correspondence.

THE STEAM EXCAVATING-MACHINE.

Sir.—In reply to the inquiries of your correspondent, in the Journal of last week, relative to the excavator, I beg to state, as a proprietor of that patent, that its operations, while at work near Brentwood, were entirely satisfactory to the engineers and contractors who visited the machine. That work was an experimental one; and some annoyances were presented there which would not occur on a more extensive cutting—the chief of which being, the small number of waggons supplied for receiving the earth, which occasioned much loss of time—in fact, none questioned the facility and rapidity with which the material was excavated. The encomiums passed on the apparatus by eminent contractors, were of the most flattering order, and, perhaps, had much to do with the subsequent results. Your correspondent asks, why it has not been employed?—This is not for me to answer. Among the causes, however, may be the fact, that there were several owners, in some cases strangers to each other, and there has not been that unanimity of opinion which was requisite to carry out the best plans for their mutual interests. However, I am not aware that any reason exists at this time to prevent its employment. A number of new machines have been put into operation this summer in America, where the cost of "getting and filling" earth by manual labour, does not average more than in this country; and, when the cost of the apparatus is considered, it is good evidence of the profit afforded by its employment there; besides, the machines in Russia have been in constant use on the Moscow and Petersburg line, with great economy over even the low price of labour in that country.

The arrangement of the machinery has been much simplified and improved, by which the same apparatus is adapted to "dredging as well as excavating," it being only requisite to be placed in a barge for the former purpose; and I forward you a cast from an engraving prepared for the *Transactions of the Engineers' Association*, which you can use as you think proper. This represents the improved apparatus on a barge, excavating a canal, where the material would be laid on the side of the cutting. The employment of these machines for dredging has proved their advantage over the ordinary method, as regards cost of apparatus, expense per day, wear and tear, and quantity of material removed in a given time. I cannot say more, in reply to your correspondent, than to refer to your own data, taken from your personal inspection and investigation at the Brentwood works, and published in your Journal at the time; from which, it appears, that the machine moved at the rate of 120 yards per hour, at a daily expense of less than 50s., including engineers, fuel, oil, and interest, with 15s. for wear and tear and contingencies; in fact, it is not probable a more important and economical invention exists than this one, and the proprietors have been at great expense to prove its utility; and I trust there will be no further delay as to its adoption, believing that the more thorough the investigation, the more satisfied most contractors become of its great utility, as regards economy, time, and trouble, in excavating, over manual labour.—J. BURROWS HYDE: Barge-yard, Bucklersbury, July 30.

[We have received the engraving referred to, and to which we shall give a place in our next Journal—also appending some general particulars, as to cost, &c., with the purposes to which the excavator can be applied.]

IMPROVEMENTS IN SMELTING IRON.

Sir.—I am glad that Mr. Yates has come forward with some leading features of his improvements in smelting iron, but could have wished he had gone more into detail, by stating the size of hearth, height of dam, and tuyeres, angle and diameter of boshes, diameter of top, height of furnace, and whether of a conical or conoidal form over the boshes; the power of the engine now producing 15 tons in 24 hours, and whether it is a reciprocating, or rotary engine, such as he is in the practice of making. As it is necessary to have the above particulars, in order to form a correct estimate of the improvement—and as the subject is one of great national importance, and will, doubtless, lead to the advantage of the inventor—I hope Mr. Yates will, with his usual urbanity, have the goodness to give an explicit answer.—J. WALKINSHAW: Coleford, July 28.

ELECTRICITY AS APPLIED TO SMELTING ORES.

Sir.—I, last week, saw in your Journal an article on the subject of smelting by electricity, and I rejoice to find the matter is now about being taken up with spirit and energy. I believe Mr. Wall's patent was obtained sometime in 1845, and he made experiments upon iron which were highly satisfactory, as tested by Dr. Ure and other high authorities. I rejoice, therefore, that he has succeeded in inducing the Dartmoor Consolidated Mining Company to take this valuable patent up; and I predict the time is not far distant when the county of Devon will reap the benefit of its use. To Dartmoor and the neighbourhood it will be an advantage much wanted, there being many rising mines in the locality, the ores from which are carried to Truro and to Swansea to be smelted,—which may now be collected at the Dartmoor smelting-house, and wrought within a few miles of the pit's mouth. When we come to examine the geological features of this district, and compare them with the same character of country down along in the districts of the west of Cornwall, it is only surprising that mining resources have not been pushed with more vigour in this part as, from the masses of granite and other kindly indications dispersed throughout the country, there is no doubt both copper and tin are to be found in great abundance. In Cornwall the richest copper and tin mines have invariably been found to exist at the junction of killas and granite. Yet in Dartmoor, possessing a larger tract of granite than is observed in any part of Cornwall, scarcely any research has been made for mines, although discoveries have been made in Devon, and even in the neighbourhood of Dartmoor, of mines that have returned as large profits as any of the mines in the western district. Take, for instance, Great Wheel Friendship, which has returned upwards of 500,000l. clear profit to the shareholders; this mine producing tin, copper, and lead ores. Again,—Wheat Betsy (lead mine), also on the borders of Dartmoor, has returned upwards of 120,000l. clear profit; and Great Wheel Maria has made unprecedented returns in the annals of mining, at a very inconsiderable outlay. Then, again, Dartmoor Consols, Birch Tor, Wheel Francis, Virtuous Lady, Tavy Consols, Wheel Anderson, and many others too numerous to mention, are promising mines, all within a few miles of the Dartmoor Hills; and there cannot be a doubt that, in spite of the old adage, "There is no mine east of Redruth Church," the day is not far distant when Devon will prove a mining county of no mean importance; and Dartmoor will be known as one of the first and most promising mining districts in the two counties. I shall look forward most anxiously to the workings of the present openings, and to the development of the mines in the neighbourhood; as also watch the experiments as they proceed in electricity at the Dartmoor Consols,—the whole of which I will communicate to you, if you think my remarks worthy of insertion in your Journal; but you must not expect more than a true statement of facts, the result of my observations on the spot.—From your constant reader, DEVONIAN: Plymouth, July 26.

SMELTING BY ELECTRICITY.

Sir.—In your paper of Saturday last, there is a paragraph headed "Smelting Ores by Electricity." This is a subject which appears to be a kind of puzzle—a mystic influence—that has no definition, and yet every one seems interested—at least, all connected with the copper trade are, although all equally ignorant about it. On reading the article referred to, I turned up two patents of Mr. Wall's, and the mystery is still mystified, as the electricity is not applied to smelting the ores, but to purifying the metal after being smelted. The term smelting, according to Dr. Johnson, is the extraction of metal from its ore. Now, Mr. Wall applies the electricity to the metal after being extracted, and should rather have been the application of electricity to the refining and purifying of metals—so that it appears to me, that this is not the process which has been so often referred to in your Journal, as calculated to effect the great change in respect to copper smelting, and which was to save the smelters so much in fuel. Probably you, or some of your correspondents, will clear up this mystery a little. I may here mention a statement reported to me last week by a person who was witness to the process—namely, that smelting-works are erected in the neighbourhood of London, and that the ores, as they come from the mines, are put into the fusing-furnace, and that in six hours they are *tapped*, giving copper ready for the refining operation; and the slags, or scoria, are moulded into bricks for building, and does not contain 1/4th per cent. of copper. The materials used to effect this was a secret, but their cost did not exceed 10s. per ton of copper obtained. No electricity was applied. No doubt you, or some of your readers, will be able to give more details of this process. Now, it struck me, that, if to this process were added that of Mr. Wall's, for refining and purifying, it

would be one of the greatest gifts science could confer on the country, relieving the copper trade from the shackles of a most iniquitous monopoly, and giving the copper-workers good copper—an article they have not been accustomed to get these many years. A CONSUMER.
Shoe-lane, London, July 28.

AMMONIA—SMELTING COPPER ORES.

Sir.—I have just read in the *Mining Journal* of the 24th inst., a very excellent letter from Mr. John Howson, expressing his disbelief in the formation of ammonia when a metallic sulphuret is acted upon by steam with heat. Of this fact I have been aware for the last 20 years, having then noticed it under one peculiar circumstance—the formation of ammonia taking place in the open air. I tried in vain to accomplish the same result in furnaces, or in any confined vessel. I have always regarded this as a subject of the greatest importance, and never lost sight of it; but it is only within the last 12 months that I have finally determined, to my own satisfaction, the real state of the case, and only very lately contrived the requisite apparatus for carrying out the operation upon a large scale. The details are only known to myself, although I have confided the principles to competent and trustworthy judges, who express themselves satisfied of their correctness. I look upon this as a valuable invention, and am desirous of securing some benefit to myself. I must, therefore, for the present, refrain from giving Mr. Howson such an explicit reply to his letter, as its merits and style would, otherwise, justly demand.
Swansea, July 26.

JUPITER AMMON.

IMPROVEMENT IN SIGNALS FOR RAILWAYS.

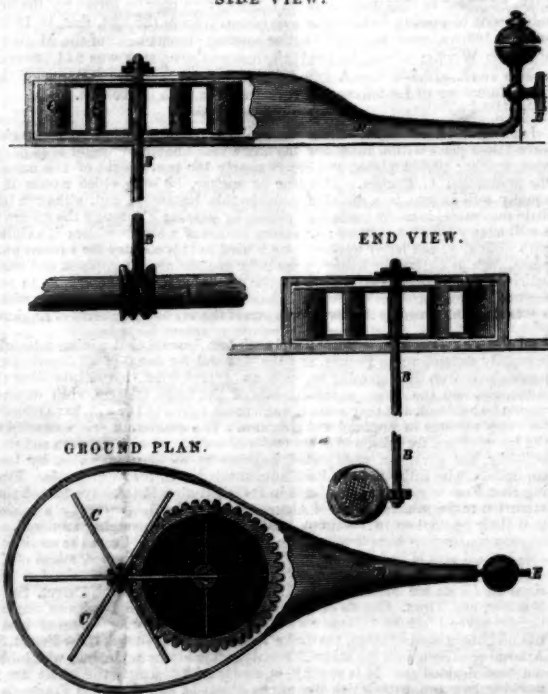
Sir.—Shortly after the very serious accident at Wolverton, on the London and North Western Railway, my attention was directed to the principle of signalling generally adopted on railways—the use of different coloured flags by day, and different coloured lights or lamps by night. This principle, so far as I know, has in general wrought well, and might for some time at least have retained the confidence of railway proprietors and the public, but for the Wolverton accident, which, in my opinion, may be traced to this very objectionable mode of signalling. It is a well-known fact, that many individuals have not the power of distinguishing colours at all; and that, where this defect of vision does not exist, any sudden transition of the eye from one colour to another, occasions confusion and indistinctness in determining the colour presented to the eye. If these statements are correct, then I think that the confusion, and consequent fatal blunder of Fossey, are easily accounted for; for should the memory fail for an instant in its power of associating a certain coloured light with a particular train, there is nothing tangible left to resort to for its correction. The approaching train leaving but little time for reflection, necessitates a movement of some kind on the part of the watchman, which movement has too often been of a wrong kind, although not always attended with such serious results as in the case referred to. What I would suggest is, that each lamp used as a signal, should take the form of a letter, which letter should be significant of the character of the train to which it is attached—for instance, a lamp in the form of a P should be placed on a passenger train, and one of the form of an L for a luggage train, and so on, in respect of the other descriptions of trains. The same principle I recommend to be adopted for the signal lights at the different stations. It would then be immaterial what colour of light is used, as the recognition of a letter, either on the train, or on the signal posts of the stations, would determine the movements of the different parties immediately concerned in the management of the trains. This principle, if adopted, would at once relieve the minds of all connected with the movements of the trains from all embarrassment, arising from defective memory, or disordered vision, as the appearance of a letter, the initial of the thing signified, would be at once tangible to the most obtuse understanding, and give scope for a greater variety of signals than the present system can admit of.
St. James's-square, Wolverhampton, July 26.

ROBERT BOWMAN.

RAILWAY IMPROVEMENTS—CONNECTION BETWEEN GUARD AND ENGINE-DRIVER.

Sir.—After the many serious, and often fatal, accidents which have taken place on the different lines of railway during the last few months, it behoves every one, I think, to suggest such means of prevention as he may consider will be, in some slight degree, a preventive of their becoming of so frequent occurrence. I have perused a great many letters from correspondents of newspapers on the necessity there is of a communication existing between the guard and engine-driver of passenger trains, and who have offered their opinions as to the remedying that most serious defect in our railway travelling which at present exists, but have failed, owing to a certain want of simplicity, which must necessarily exist in anything new before it will be generally adopted. This, I think, might be entirely overcome by adapting the common "fan-blast," so that it would be able to blow a whistle, to be fixed on each carriage where a guard is stationed.

SIDE VIEW.



My meaning, however, will be much better understood by examining the annexed drawings, which I have roughly sketched out:—A is the axle-tree of the carriage, on which is fixed a spiral screw. B is an upright shaft, with a small cog-wheel fitting into the screw on A; also having attached to it, at the top of the carriage, fans, as in the common fan-blast, but revolving horizontally, which enables the required motion to be obtained without any unnecessary and superfluous cog-wheels, and economises the space required for its operation. C C are the fans, fixed to the upright shaft, B, which will, of course, revolve which ever way the carriage is moving, and cause a current of air to pass along the tube, D, and the cock being open, so through the pipe to the whistle, which it will immediately cause to sound. As the whistle would only be required to be blown at particular, and perhaps only a few, times in a distance of several miles, it would be quite unnecessary for the fan to be continually revolving; I, therefore, would propose to adapt a small handle, by which the apparatus might be thrown in and out of gear; and, at the same time, to open the cock, E, which could be easily fitted, to it to suit the particular part of the carriage to which it might be affixed. This cock would be requisite, otherwise the whistle would continue to sound for some time after being thrown out of gear, owing to the impulse which would be given to it. It should also be able to be moved without interfering with the other part, so that the guard might sound it one or more times distinctly, according to the information he wished to convey to the driver—thus, once sounding might be to draw

attention; two, to shut off his steam; three, to stop, and so on. The speed of the fan might be varied by the addition of a cog-wheel or two, according to the quantity of air required; and such wheels I have shown in the ground plan. The dimensions are merely guessed at, and several things will be found wanting which I have not shown, but which do not interfere with the principle of the apparatus. But supposing it to be made in the same proportions, which I believe would be found much too large, it would only occupy a space of 4 ft. long, 2 ft. wide, and 7 or 8 in. deep, and cost probably not more than 1l. or 2l. at the most. I have never seen or heard of the fan being adapted to a purpose of this description; but can see no possible reason why it should not be made equally available for this, as for the many to which we see it daily applied.
Bury, Lancashire, July 26.

W. PORTER MADDISON.

UNION BANK OF LONDON AND BUILDING SOCIETIES.

Sir.—At the late general meeting of the Union Bank of London (reported in your Journal of the 17th inst.), a proprietor said, "that he was sorry to hear that the directors had refused to keep the accounts of building societies." The chairman (Sir Peter Laurie) said, "he knew that was the case, for he had not the best opinion of building societies; he had always thought they were dangerous speculations." Wise Sir Peter!—Do the other directors entertain the same liberal and enlightened views of this new mode of investment for the middle classes, who cannot afford to buy railway shares, or figure as *major domos* in joint-stock banks? I cannot think they can agree in the policy or wisdom of such declaration, and think the directors of other banks, who do not think badly of those investments, are rather pleased with the silly prejudice, by sending accounts to their counters. Sir Peter also said, "he had declared it from the bench; and he now again said, they were of no use to them in their banking operations." So all the accounts which do not bring a direct profit to the bank are to be sent adrift!—Does the "Union" offer no convenience to the public? Will not one account frequently bring others of a profitable character? I cannot believe that building societies in general are not of use to a bank, nor have I ever before heard them called *dangerous speculations*; but the sagacious, learned, and *superior* alderman further arrogantly observes, "I hope we are not to be called to account here for our mode of management in our banking affairs; if so, I shall call upon the proprietors to rally round the directors." This is worse than preposterous; for where are directors' actions to be analysed?—where should such questions be asked?—and where should directors give every explanation to their proprietors, many of whom have more pecuniary interest than themselves, but at their annual meetings? I am sorry the chairman of one of our London banks should be so short-sighted, or even ignorant, as to expose himself in so questionable a manner, and one so detrimental to his co-proprietors.—A SHAREHOLDER OF THE UNION BANK OF LONDON: Marylebone, July 27.

DECEPTION IN PRINTS ENGRAVED IN FRANCE.

Sir.—The defects of French prints imported into England has often been experienced by a great number of purchasers; and at the Royal College of Chemistry, Hanover-square, Mr. Taylor, on Wednesday evening, clearly pointed out the recent investigations which have been made on the subject; the results of which are as follows:—Many of these French engravings which have a most beautiful finish, and have been sold in England at a high price, present, after a short exposure to the air, dark yellow spots round the edges, which ultimately spread over the whole surface of the paper, and the print is completely ruined. When this circumstance was first noticed, it was expected by chemists to be some vegetable substance; but, when examined by a powerful oxy-hydro microscope, such was found not to be the case; and it, therefore, became a subject of further inquiry. The fact is, the French engravers, in order to produce a great number of proofs, prepare the paper with carbonate of lead, which also gives it a more vivid and ivory-like appearance. The preparation is, no doubt, laid on with a brush, about the consistency of cream; and the cause of discolouration is obvious, as Mr. Taylor clearly showed. Place a piece of this paper in a jar of sulphuretted hydrogen, and it will immediately become of a dirty brown colour; in some places almost black on the side thus prepared—while the other remains uninjured. This gas is largely generated wherever coals are burned, and floats in considerable quantities about the upper portions of the rooms; and wherever engravings thus prepared are hung in such situations, utter ruin, however well protected by framing, is certain. As a proof that prints are so prepared, Mr. Taylor dipped another piece of the paper into a glass containing a solution of hydrosulphite of ammonia, which is a sure test for the presence of lead; and the result was perfect conviction to all present. I would recommend all persons who are purchasing prints to take a small bottle of this solution, which any chemist will mix for 3d. or 4d., in their pocket, and, with the point of a penknife dipped therein, a touch on the extreme edge of the paper will tell if the paper is prepared with this substance. Whether this has been practised by the French with the intention to impose on purchasers, or from chemical ignorance on the part of the manufacturers, I am not prepared to prove. I enclose you a specimen of this French paper after immersion in sulphuretted hydrogen. G. SHEPHERD, C.E.
London, July 28.

[We are not aware whether our English engravers are dishonest enough to use paper so prepared for valuable engravings; but it is evident the art in this country has long been practised, as the elegant ivory faces (when fresh) of our address cards evidently testify; they become, if remaining a few weeks in the least exposed, even in the tightest fitting card case, quite unfit for presentation. Mr. Shepherd's specimen may be seen at our office.]

VENTILATION OF MINES—MR. GIBBONS'S SYSTEM.

Sir.—In answer to a paragraph contained in a letter of your correspondent, Mr. D. Mueset, of last week, where he observes, "In another exposure, which has created sensation in your columns as connected with Mr. Gibbons's system, that accident proves its efficacy—it took effect in the appointed receptacle, or sewer; and the man who, by gross disobedience, could leave his naked light, &c. &c." In order to put Mr. Mueset right on this point, and for the satisfaction of your readers, and with justice to my former "representations" (or, as Mr. Taylor at the time chose to term them, *misrepresentations*) respecting this explosion, the accused, John Love, surrendered himself, and took his trial for manslaughter, on Friday last, at the Stafford assizes, and was very justly acquitted of the serious charge, without even admonition or reprieve; and, further, the counsel for the prosecution, after calling a few witnesses, one of whom acknowledged to having previously left the naked candle for Love, very justly observed, that the case had been wholly "unrepresented" to him, and that he would not proceed further,—whereupon the judge directed the jury to find a verdict of *Not Guilty*, which was accordingly done, doubtless to the gratification of all. It is not by this that I would advocate the right of a miner to leave his lighted candle in a pit after his work was ended,—far from it,—but to do justice where justice is due; and only wish the prosecutors had been aware of the great danger of such a rule before such an invincible and sad catastrophe occurred.—HENRY JOHNSON: Dudley, July 28.

THE HIGH LEVEL BRIDGE.—This is, as our readers are aware, the name given to the splendid double bridge over the Tyne, at Newcastle, connecting the York and Newcastle with the Newcastle and Berwick Railway, the finishing of one arch of which we noticed in last week's *Mining Journal*. It was expected that Mr. R. Stephenson would have satisfied himself of the thorough safety of this arch, and visited the works while the weight by which it was tested (300 tons) remained on it; but he wrote, expressing his perfect satisfaction at what he had heard, and did not think it necessary to come. Mr. G. Hudson, however, "popped in" upon the contractors (Messrs. Hawks and Crawshaw), on his way to Sunderland to address the electors. He examined the arch with his usual interest, and expressed his perfect confidence in its strength, and satisfaction in its mode of construction; while there, Mr. Hosking, the superintendent under Mr. Stephenson, and the contractors, caused another 100 tons to be added, yet not the slightest strain, or deflection, was visible. Mr. Hudson made the men a gratuity of 20l. before he departed. The above weight of 600 tons is considerably more than double what the bridge can ever have to sustain by the passing trains; but it has been thought necessary, to relieve the public mind from any misgiving, and the confidence of architects and contractors was evidently fully justified. The principle adopted is the "bow and string"—a form well known to engineers for its superior strength and stability, but cannot be adopted where arches are required to give sufficient headway. There will be six arches of 125 ft. span each, and will be independently supported on their own piers, independent of adjoining support—the only pressure will be vertical, resulting from the weight of the arches. The novel and leading feature in this bridge is its double roadway—one above for trains, another below for foot passengers, horses, carriages, &c., which required a new mode of arrangement, and which has been beautifully carried out in the architectural design, and the convenience of arrangement.

MINING ADVENTURERS' SUBSCRIPTION ROOM, ORIGINAL REGISTRY OFFICE FOR THE SALE AND PURCHASE OF MINING SHARES.

CROSSMAN, SOMMERS, AND CO., AGENTS,
28, THREADNEEDLE-STREET LONDON.

SHARES FOR DISPOSAL.

Bedford United Mines
Coombe Mine
Dartmoor Consols
Devon and Courtney Consols
East Wheal Rough Tor
Great Wheal Frederick Tin Mine
Great Wheal Rough Tor
Wheal Susan
Graham and St. Anby
New East Crowdale
North Wheal Camel

Princes Royal
Ponant
South Wheal Sophia
South Wheal Maria
Victoria Tin Mining Company
Wheal Mary and Elizabeth
Wheal Susan
West Wheal Rough Tor
Wheal Esna
&c. &c. &c.

ELBOROUGH SILVER-LEAD, CALAMINE, AND BARYTES MINE.—PROSPECTUS.

This MINE is situated in the parish of HUTTON, Somerset, within four miles of Weston-Super-Mare, and Uphill Quarry, and 2½ miles of the Banwell station, on the Great Western Railway, is divided into 256 shares, and managed on the cost-book system. The sett, which comprises 800 fathoms in length and 400 fathoms in width, contains a great number of lodes, which have proved very productive as far as they have been wrought.

It is well-known that for centuries past large quantities of lead ore have been raised by the system of gruffing, a rude sort of mining of the district, and parties so working, obtained large profits, although paying at the rate of 1-4th and even 1-4th to the lord, as dues or royalty. But, although this sett has been a very productive one, even by the rude operations of the gruffer on the backs of the lodes, and within a few fathoms of the surface, yet for want of more mining experience nothing has been done effectually in proving the lodes; traces of the gruffer's operations are visible for several hundred fathoms in length, and the rubbish, or waste deposits thereon, on the surface, sufficiently indicate that large returns may be expected, if these mines are properly worked.

The report of the neighbourhood induced the present company in May last (1846) to solicit a grant of the sett; and having obtained it at moderate dues, they commenced clearing up the old workings in several places; and having fully satisfied themselves of the value of the sett, they have commenced sinking two new shafts, in order to get under the old workings, and to effectually work the mine—one of these shafts is on a perpendicular lode, having six other lodes underlying towards it, and which, if they continue their present underlay, will all be intersected within the depth of 60 fathoms from surface.

The other is on a lode from which several tons of lead have been raised by the present company, from the old workings, which on this lode have been prosecuted to the depth of 30 fathoms, leaving a course of lead now in the bottom—but having been wrought in such a zig-zag manner, they are unfit for the purpose of mining advantageously; this shaft is, therefore, being sunk east of these workings in whole ground.

It is the general opinion of miners acquainted with the locality, that this mine can be prosecuted to the depth of 100 fathoms, without the aid of a steam pumping-engine; and this, with other advantages connected with the concern, justify the proprietors in stating, that in their opinion the outlay of a comparatively small capital will bring the mine into a profitable state of working.

REPORTS.

TO MR. R. VIVIAN, TUCKERHILL, CAMBOURNE, CORNWALL.

Sir,—I have been a resident in this part for the last eight years, and have traversed this mineral country from the Bristol river to Wells, which is about 30 miles north and south, and from Bath to Bridgewater river, which is about 40 miles east and west, and have, in so doing, examined very carefully the geological and mineralogical position of those localities, and find they are composed of mineral or mountain limestone, old red sandstone, new red sandstone, lias, penant, magnesian limestone, and conglomerated limestone, quartz, fluor-spar, siliceous, and jasper; there are hundreds of lodes and veins in this range, which are composed of mineral ores, such as lead, iron, copper, manganese, calamine, barytes, pyrites, reddie, and white ochre, and yellow ochre, and white lead ore.

Having heard that there were some of my countrymen at Elborough, near Banwell, working a mine, I went to see them on Tuesday, and found Capt. Trevithick and his party dressing lead and calamine; Capt. Trevithick asked me to walk around the mine with him; I went underground at Vivian's shaft, and saw Vivian's lode, 17 fathoms deep, nearly perpendicular—a very kindly lode, 2½ ft. big, composed of flookan, elvan, and lead—good saving work; at Chapman's shaft a strong lode, and very kindly north lode: there are several lodes south of Vivian's lode, and underlying north, which I think are likely to drop in and improve the lode in depth. I think this altogether a very promising mine. It is in the mountain limestone that this mine is, and it is in the mountain limestone that the principal British lead mines are situated, and they are those of Somersetshire, Derbyshire, Yorkshire, Cumberland, Shropshire, Flintshire, and Denbighshire—these are the most productive for lead and calamine.

The lead mines in Cornwall and Devon are in primitive rock, so that the Cornish and Devon mines in general have but little about limestone formation. I think Somerset will make a great mining district, some day. I have an account of a little mine that paid in 1812, £800 15s. 10d. for dues; and take the average, they were no more than 15 fathoms deep, and they rose hundreds of pounds' worth, 8 or 10 fathoms deep; this mine is four miles east of Elborough Mine. THOMAS ROBERTS.

Ostland's Cottage, Wington, near Bristol, Somerset, May 6.

Sir,—In compliance with your wish, I hereunder hand you a few remarks on the present appearances and future prospects of Elborough Mine.

This mine is situated on Elborough-hill, in the parish of Hutton, and about three miles distance from Banwell station (Great Western Railway); the sett extends nearly a mile on the course of the lodes (eight or nine in number), nearly the whole of which have been worked on the backs, by the old men, and from the appearance of the work done, great quantities of lead have been raised.

I find your operations are at present confined to sinking a shaft on the course of Vivian's lode, which appears to be the principal one, and most regular in its course, nearly perpendicular—its longitudinal direction is about 10° south of east; this shaft is sunk 14 fathoms from surface, which point the lode is 2 feet wide, composed principally of light-coloured flookan, spar, and calamine, impregnated with lead throughout—a very kindly lode, indeed; I would strongly recommend you to get down this shaft with all possible speed, bearing in mind there are four or five lodes to the south of this, dipping towards the lode you are now sinking on; should they retain their regular course and underlay, you will have the junction of these lodes in the shaft, within the depth of 60 fathoms; when down about 16 fathoms from surface with this shaft, they cut into a large cavern, which has been made into a good whist-plat—here an end was begun, driving east of shaft, where the lode is at present small—composed of flookan, spar, and lead. I would also recommend you to place four men in this end, as it is my opinion, that the whole of the lodes in this part approximate, and form a junction between 20 and 30 fathoms further east than you now are—this being done, you will fairly prove this part of the mine; from the favourable state of the ground, a great quantity can be developed in a short time; should it continue as it now is, the cost for driving or sinking will not exceed 60s. per fathom.

On Chapman's works the lode has been laid open about six fathoms deep, where it is 3 feet wide, composed of barytes, calamine, and beautiful spar, intermixed with lead—a very promising lode.

Further north still, about 60 fathoms, there is a parallel lode with the one last mentioned; this lode has been wrought on 14 fathoms deep, where it is 2 feet wide—composed of barytes and a little lead; Capt. Trevithick informs me the returns from this place have been equal to the outlay; these works are for the present suspended.

Before I conclude, I beg to observe, that it is my opinion, from the congenial strata in which the lodes are imbedded, and the promising appearance of the lodes at this shallow depth, that you will at no distant period have a profitable concern. F. C. HARPER.

Mendip Hills Mines, May 6, 1847.

PATENT GALVANISED IRON AND WIRE ROPE WORKS,
MILLWALL, POPLAR.

ANDREW SMITH begs to inform the Mining, Railway, and Shipping interests, that he has obtained a PATENT for an IMPROVED METHOD OF GALVANISING IRON, producing a much superior article at a considerable saving in cost—the improved process for galvanising wire rope, adding only £10 per ton instead of £20, under the ordinary process. The rope is extensively used in damp situations, for mining and railway purposes, and for ships' standing rigging.

IMPORTANT TO RAILWAY COMPANIES.

PATENT KAMPTULICON COMPANY, 18, CORNHILL.
This company having completed their new factory, are prepared to supply railway managers and contractors with an elastic material (perfectly non-absorbent) to place between the rails and sleepers, and between the frames and bodies of carriages, to prevent jarring, and consequently, wear and tear. The elastic planking is strongly recommended to be used for the backs and sides of carriages, to prevent splinters when accident occurs.

By order of the board, P. G. GREVILLE, Secretary.

TO ENGINEERS, RAILWAY CONTRACTORS, MINING AGENTS, IRONMASTERS, AND OTHERS REQUIRING FINE GREASE FOR MACHINERY AND AXLES of every description.—JOSEPH FERRIVAL'S IMPROVED ANTI-FRICTION GREASE is kept up—admitted to be the most useful, economical, and best preparation of the kind ever offered to the public.

References to scientific and practical men can be given, and testimonials shown of its great excellence.—Samples forwarded on application at the manufactory, Green-street, Wellington-street, Blackfriars-road, London.

THE LATE ACCIDENT AT THE DEE BRIDGE.

PATENT METALLIC SAND, OR ENGLISH POZZOLANO
GREAT REDUCTION IN PRICE.

Extensively used in mortar and concrete at the great tunnels on the London and Birmingham Railway, in the foundations of the new Houses of Parliament, sea walls on the South Devon Railway, Clifton Reservoirs, and other works of importance. From its chemical qualities, the sand, in mortar, forms, in admixture with lime and cement, a concrete, mortar, or concrete, of fine hardness, and almost entire impenetrability; and, from its adhesive and impervious qualities, it completely and for ever excludes water. The more it is exposed to the atmosphere, and to wet and damp, the harder and more durable it becomes.

As an external stucco, the metallic sand is unaffected by frost or wet; in appearance it resembles the best Portland stone—requires, therefore, neither colour nor paint, and is entirely free from vegetative cracks and blisters, to which Roman cement is liable.—Further information will be given, and specimens shown, on application to Mr. C. K. DYER, 4, New Broad-street, London.

ANALYSIS OF THE PATENT METALLIC SAND.

Silica	49	Lime	6
Oxide of iron	32	Magnesia	2
Alumina	8	Zinc	3

TO ENGINEERS, BOILER-MAKERS, AND OTHERS.—LAP-WELDED IRON TUBES, FOR STEAM-BOILERS.

W. H. RICHARDSON, JUN., & CO., DARLSTON, STAFFORDSHIRE.
MANUFACTURE ALL DESCRIPTIONS OF WELDED WROUGHT-IRON TUBES, FOR STEAM, GAS, &c., of any required length and diameter, on the new and unequalled principle of Mr. J. Brown's recent invention (patented August, 1846).—Address as above.

BIRMINGHAM AND OXFORD JUNCTION RAILWAY.

THIRD CALL OF FIVE POUNDS PER SHARE.
The directors having passed a resolution, requiring the shareholders to pay a further CALL of FIVE POUNDS on each and every share held by them respectively, on the 24th day of August, 1847.—Notice is hereby given, that the shareholders are required to PAY each call on the day appointed, to one of the under-mentioned bankers; and, in default thereof, they will be charged with interest, at the rate of 5 per cent. per annum, from that date until the said call is actually paid:—

The Birmingham Banking Company } Birmingham.
Messrs. Attwoods, Spooner, and Co. }
Or at their London Agents:
Messrs. Jones Loyd and Co., for the Birmingham Banking Company.
Messrs. Spooner, Attwood, and Co., for Messrs. Attwoods and Co.; and at
Messrs. Moss and Co., Liverpool, for the Birmingham Banking Company.

A circular will be sent to each shareholder, which must be deposited at the bankers when the call is paid.

By order of the board of directors, JOHN WM. KIRSHAW, Secretary.

34, Bennett's-hill, Birmingham, June 12, 1847.

CALEDONIAN RAILWAY (CLYDESDALE JUNCTION) GUARANTEED SHARES—EIGHTH INSTALLMENT.

NOTICE.—The directors of the CALEDONIAN RAILWAY COMPANY have, in terms of the Special Act and the Companies' Clauses Consolidation Act, passed a resolution, calling for an EIGHTH INSTALLMENT of FIVE POUNDS per share on the above shares, PAYABLE into one of the under-mentioned banks, on or before Friday, the 27th proximo, after which day the bankers will charge interest, at the rate of 5 per cent. per annum.

LONDON.—Messrs. Masterman and Co., 35, Nicholas-lane, Lombard-street.
LIVERPOOL.—Messrs. Moss and Co.
MANCHESTER.—Sir Benjamin Heywood, Bart., and Co.
BRISTOL.—The National Provincial Bank of England.
NEWCASTLE-ON-TYNE.—The Newcastle Commercial Banking Company.
EDINBURGH AND GLASGOW.—The Commercial Bank of Scotland.

D. RANKINE, Treasurer.

Office, 129, Prince's-street, Edinburgh, July 31, 1847.

[9th and 10th Vic. cap. 379, sec. 15.—And be it enacted, That, until the said guaranteed dividends of 25 per centum per annum shall accrue, as aforesaid, the said Caledonian Railway Company shall pay to the holders of the said guaranteed stock interest, at the rate of 24 per centum per annum upon the sums already paid-up in respect of their shares, from the date of the passing of this Act, and upon the sums hereafter to be paid up in respect of such shares, from the date of such payments, which interest shall be payable half-yearly, on the 15th day of August and 15th day of February in each year.]

A shareholder cannot legally transfer any share until he has paid all calls made upon him; and transfers of shares received at this office, after Thursday, the 3d proximo, cannot be registered till the above call is paid on them.

N.B.—Payments are not received at this office, nor otherwise than at one of the above banks.

DURHAM COUNTY COAL COMPANY.—Notice is hereby

given, that the ANNUAL GENERAL MEETING of the proprietors in the above company will be HELDEN at the George Hotel, Conyestreet, York, on Tuesday, the 10th day of August next, at Twelve o'clock at noon of the same day; and that at such meeting the appointment of Mr. John Neas, of Huddersley, as trustee of the company, in the place of Mr. Andrew White, will be proposed.

And Notice is hereby further given, that a SPECIAL GENERAL MEETING of the said Durham County Coal Company will be HELDEN at the said George Hotel, on the said 10th day of August next, at One o'clock in the afternoon of the same day, or so soon afterwards as the proceedings of the said Annual General Meeting shall have terminated, for the purpose of obtaining the sanction of the proprietors of the said Durham County Coal Company to the exercising by the trustees of the said company, by the order and direction of the major part of the directors of the company, or of the persons for the time being acting as such, and as when such trustees and major part of the directors shall so think fit, all such every or any of the powers of sale, mortgaging, letting, or other disposition contained in an Act of Parliament, passed in the 7th year of the reign of her Majesty Queen Victoria, intituled "An Act for regulating Legal Proceedings by or against the Durham County Coal Company, and for other purposes," so far as such powers relate to or concern any collieries or coal mines, or coal seams, or seams of coal, held by or for the benefit of the company, to the end that such trustees and directors may be at liberty, without the sanction of any further general or special general meeting, to enter into any contract or arrangement for the sale or other disposition of all or any of the collieries and other property of the said Durham County Coal Company that to such trustees and directors may appear desirable, and to do all necessary acts for the carrying out such contract or arrangement.

By order of the directors, WM. BUCKDEN, Manager and Secretary.

Durham County Coal Office, Stockton-on-Tees, July 29, 1847.

EUROPEAN GAS COMPANY, 39, FINCHBURY-CIRCUS, LONDON.

NOTICE is hereby given, that an EXTRAORDINARY GENERAL MEETING of the proprietors of the EUROPEAN GAS COMPANY will be HELD at the House, or Office, of the said company, situate No. 39, Finchbury-circus, in the city of London, on Thursday, the 12th day of August next, at Two o'clock in the afternoon precisely, for the purpose of determining whether any one or more of the establishments of the company in France, and the lands, buildings, works, and other property of the company, belonging thereto, should be vested in trustees, to be approved by the directors, with the view to the formation of one or more French companies, so as to derive the co-operation of local interests; and whether such establishment or establishments, lands, buildings, works, and other property, including the goodwill thereof, should be sold, with the approbation of the directors, to such French company or companies, upon, amongst other terms, those of securing to the present proprietors the right, if they should think fit, of taking an amount of shares therein proportionate to the amount of shares held by them in the present company—such proportion and other terms to be settled by the directors; and whether, if necessary, the Deed of Settlement, and other the existing laws and regulations, of the company should be altered or repealed, and sufficient new laws, regulations, and powers given to the directors for carrying the proposition into effect; such alterations and laws, regulations and powers, to be settled by counsel on behalf of all parties.

This 24th day of July, 1847. By order of the directors, J. B. GREAVES, Secretary.

SLIGO AND SHANNON RAILWAY COMPANY.

Winchester-house, Old Broad-street, London.—Notice is hereby given, that the HALF-YEARLY ORDINARY MEETING of the shareholders of this company will be HELD at their offices, as above, on Friday, the 13th day of August next, at Twelve o'clock at noon precisely; and that it is intended to propose, at the said meeting, that the board shall, in future, consist of six directors, in lieu of nine, the present number.

Dated July 29, 1847. A. GORE, Secretary.

ELECTRIC TELEGRAPHS.—We beg to notify to all RAIL-

WAY COMPANIES, that, having secured LETTERS PATENT in all parts of Europe, as well as America, for our "ELECTRO-TELEGRAPHIC CONVERTER," we shall, on and after the 12th of next month (August), be ready to exhibit its advantages over all other TELEGRAPHS, and to demonstrate its certainty, power, and simplicity, with a THOUSAND MILES of WIRE, and through a LARGE NUMBER of INSTRUMENTS than can be used under any existing principle.

After which we shall be happy to treat liberally for its adoption, and to GRANT LICENSES, without control or restriction as to its use. BRETT & LITTLE, Furnival's Inn, London, July 29.

IMPORTANT TO RAILWAY AND STEAM NAVIGATION COMPANIES, MANUFACTURERS, AND ENGINEERS.

W. BROTHERTON AND CO'S
PATENT LUBRICATING FLUID (or Animal Oil) FOR ALL DESCRIPTIONS OF MACHINERY.

W. D. & CO. have the pleasure to state, that the above article is extensively used in her Majesty's Steam Navy, and by several of the principal Steam Navigation and Railway Companies, and is pronounced by them, and by the first practical engineers of the day, to be far better adapted for the purposes of lubrication than any other article hitherto used for such purposes. The Patent Lubricating Fluid is equally applicable for the most intricate and fine pieces of machinery, as for the heaviest bearings of the steam-engine. It is cheaper, much more economical, and cleaner than oils at present in use; is free from smell, and calculated to effect a vast saving in the expenditure of working steam powers.

Further particulars can be had, and testimonials seen, by application to the manufacturers, W. BROTHERTON & CO., Hungerford Wharf, Strand, London.

N.B.—The above article will burn in lamps, and give a light equal to the best sperm oil.

IMPORTANT TO ENGINEERS, MANUFACTURERS, RAILWAY AND STEAM-BOAT COMPANIES.

Messrs. W. & C. MATHER beg to call the attention of the ABOVE PARTIES to their

IMPROVED PATENT ELASTIC METALLIC PISTONS.

The PRINCIPAL FEATURE AND ADVANTAGE OF THIS IMPROVEMENT

1. Its great ELASTICITY and SELF-ADJUSTING PROPERTIES, which enable it to yield to any inaccuracy of the cylinder, whether oval or taper, and to move with the least possible friction.

2. Its extreme SIMPLICITY and LIGHTNESS, consisting of only two pieces of metal, having the vertical and lateral pressure in due and proper proportion, independent of each other.

3. It takes the LEAST possible SPACE, and is well adapted for air and water-pumps, as it allows of a larger water-way.

Messrs. W. & C. MATHER feel confident that it is the BEST ELASTIC METALLIC PACKING yet known, for the above reasons.

Models may be seen at the Ralford Iron-Works, Manchester; at W. Barker's, engineer, Newton-Moor; and also at J. Mather's, engineer, Beaufort-street, Chelsea, London.

FLEXIBLE HOSE-PIPES FOR LOCOMOTIVE ENGINES, RAILWAY CRANES, FIRE-ENGINES, GAS, &c.

PATENT VULCANISED INDIA-RUBBER HOSE-PIPES AND TUBING OF EVERY DESCRIPTION.

These pipes are made to stand hot-water without injury—are very superior to leather pipes, or the common India-rubber pipes; and, as they do not become hard or stiff in the lowest temperatures, or require any application when out of use, are particularly well adapted for fire-engines.

FLEXIBLE TUBING, of every description, for gas, chemical purposes, &c.

VULCANISED INDIA-RUBBER WASHERS, all sizes, for steam and hot-water joints, &c.—Sole manufacturer, JAMES LYNE HANCOCK,

Goosewell Mews, Goosewell-road, London.

STEAM COAL—WITHOUT SMOKE, as per experiments

made at her Majesty's Dockyard, Woolwich.

CAMERON'S COALBOOK STEAM COAL, AND SWANSEA AND LOUGHOR RAILWAY COMPANY.—(Completely Registered and Incorporated.)

OFFICES—2, MOORGATE-STREET, LONDON.

The directors are now prepared to supply steam ship companies, manufacturers, shippers, and others, with the company's steam coal, either at the company's wharf at Swansea, or in London. A statement, showing by comparative trial the superiority of this coal for steam purposes over every other, and a scale of prices, may be had on application at the company's offices here, or at their wharf at Swansea.—March 18, 1846.

IMPROVED LIFTING JACKS, IMPROVED BATCHET JACK, HALEY'S PATENT LIFTING JACK.

MANUFACTURED BY

W. AND J. GALLOWAY,

KNOTT MILL, MANCHESTER.

*. The attention of parties who employ

Lifting Jacks,

is respectfully requested to the superiority of those annexed, over those

hitherto in use.

Patent Office and Designs Registry, No. 210

Strand.—Inventors are hereby informed, that the Official Circular of Information, detailing the most economical and proper course for the protection of new inventions, and containing the Reduced Scale of Fees, or further information, may be had (gratis) on application, personally or by letter, pre-paid, to F. W. CAMPBELL and COMPANY, 210, Strand (corner of Essex-street), London.

NATIONAL LOAN FUND LIFE ASSURANCE SOCIETY,

36, CORNHILL, LONDON.

Capital £300,000.—Empowered by Act of Parliament.

This institution embraces important and substantial advantages with respect to Life

Assurances and Deferred Annuities. The assured has, on all occasions, the power to borrow, without expense or forfeiture of the policy, two-thirds of the premiums paid (see table); also the option of selecting benefits, and the conversion of his interests to meet other contingencies or necessity.

Assurances for terms of years are granted on the lowest possible rates.

DIVISION OF PROFITS.

The remarkable success and increasing prosperity of the society has enabled the directors, at the last annual investigation, to declare a fourth bonus, varying from 25 to 85 per cent. on the premiums paid on each policy effected on the profit scale.

EXAMPLES.

Sum.	Prem.	Year.	Bonus added.	Sum in Cash.	Permanent reduction of Premium.	Assured may Borrow.
1837	£217 15 1	£109 0 11	£16 0 4	£448 0 0		
1838	192 3 0	87 1 4	13 10 2	395 11 1		
1839	165 11 10	74 1 9	11 3 1	346 2 3		
1840	116 7 6	64 0 10	7 18 10	296 13 4		
1841	111 6 8	49 10 0	7 10 4	247 4 5		

The division of profits is annual, and the next will be made in December of the present year.

F. FERGUSON CAMBOURX, Secretary.

LEMONNIER, HAIR-WORKER to the Queen,

and Member of the Academie des Beaux-Arts, and who obtained a Silver and Platinum Medal at the Exposition, has JUST INVENTED several NEW DESIGNS, as Palm-Free, Wreaths, Knots, and Spherics, which he executes with hair in its natural state, without using any other cement. A variety of Tresses executed by a mechanical process.

No. 12, RUE DU COQ SAINT HONORE, PARIS.

ON NERVOUS DEBILITY & GENERATIVE DISEASES.

—Just published, the Thirtieth Thousand, an improved edition, revised and corrected, 120 pages, price 2s., in a sealed envelope, or forwarded, post-paid, to any address, secure from observation, for 2s. 6d., in postage stamps, illustrated with numerous anatomical and coloured engravings, "The Cause of its Premature Decline, with Plain Directions for its Perfect Restoration." A medical essay on those diseases of the generative organs, emanating from solitary and sedentary habits, indiscriminate excesses, the effects of climate, and infection, &c., addressed to the sufferer in Youth, Manhood, and Old Age; with practical remarks on marriage—the treatment and cure of nervous and mental debility, impotency, syphilis, and other urino-genital diseases, by which even the most shattered constitution may be restored, and reach the full period of its allotted span. The whole illustrated with numerous anatomical engravings on steel, in colour, explaining the various functions, secretions, and structure of the reproductive organs in health and disease; with instructions for private correspondence, cases, &c.

By J. L. CURTIS and CO., Consulting Surgeons, 7, Frith-street, Soho-square, London.

REVIEWS OF THE WORK:—"Manhood" a medical work. To the gay and thoughtless we trust this little work will serve as a beacon to warn them of the danger attendant upon the too rash indulgence of their passions, whilst to some it may serve as a monitor in the hour of temptation, and to the sufferer as a sure guide to health.

"We feel no hesitation in saying, that there is no member of society by whom the book will not be found useful—whether such person hold the relation of a parent, a preceptor, or a clergyman."—Sun, Evening Paper. "Curtis on Manhood should be in the hands of youth and old age. It is a medical publication, ably written, and develops the treatment of a class of painful maladies which has long been the prey of the illiterate and the designing."—United Service Gazette.

Published by the authors, and may be had at their residence; sold also by Strange, 21, Paternoster-row; Hanbury, 63, Oxford-street; Mann, 29, Cornhill; London; A. Heywood, Oldham-street, Manchester; Phillips, South Castle-street, Liverpool; Campbell, 145, Argyle-street, Glasgow; Robinson, J. I., Greenisle-street, Edinburgh; and, in a sealed envelope, by all booksellers.—Messrs. Curtis and Co. are to be consulted daily at their residence, No. 7, Frith-street, Soho-square, London; and patients can have this work privately forwarded them, by initial or otherwise, to any part of the United Kingdom, direct from the authors' residence; or from any of the above agents, on remitting 2s. 6d. in postage stamps.

ON THE SECRET INFIRMITIES OF YOUTH AND MATURITY,

With 56 coloured engravings. In Post-office order or stamps.

Just published (in a sealed envelope), price 2s. 6d.; or post-paid to any address, 2s. 6d., in Post-office order or stamps.

SELF-PRESERVATION: A Medical Treatise on Marriage, and

on those Secret Infirmities and Disorders of Youth and Maturity that are usually acquired at an early period of life, which tend to destroy physical and mental energy; arising from the anatomy, physiology, and diseases of the urinary and reproductive organs, explaining their various structures, uses, and functions, and showing the injuries that are produced in them, by solitary habits, excesses and infection. With practical observations on the treatment of nervous debility, local and